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## NATA

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LumCAT: 4-2269-A

Luminaire:

Report No: NATA0100

Voltage(V): 64.0000

Test No: GC2018101016

Current(A): 0.4200

LampCAT: BRIDGELUX VERO SE 29B

Power (W): 26.8800

Lamp flux(lm): 4386.0

PF: 0.0000

Number of Lamps: 1

Ballast type: DC

Length(mm): 100

Width(mm): 100

Phm Type: C

Height(mm): 0

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## Photometric Results

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Lumens(lm): 3873.77

Efficiency(%): 88.32%

Lumens(lm)/Power(W): 144.23

Central intensity(cd): 14051.250

Maximum intensity(cd): 14051.250

Angle of maximum intensity: C=0.0  $\gamma$ =0.0

Beam Angle(50%Imax): [C0/180]Total=23.4

[C90/270]Total=23.4

Field angle(10%Imax): [C0/180]Total=60.0

[C90/270]Total=60.0

Maximum s/h(1/2): C0\_180=0.40 C90\_270=0.40

Maximum s/h(1/4): C0\_180=0.40 C90\_270=0.40

Up flux rate of lamp(%): 0.00%

Down flux rate of lamp(%): 88.39%

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%

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Equipment:  
Temperature(°C): 25.0

Date: 2018/10/10  
Humidity(%): 60.0%

Operator: NT07  
Distance(m): 7.50

$\gamma(^{\circ})$	Average I(cd)	Zonal F(lm)	Sum F(lm)	Eff Flux(%)	Eff Sum(%)
0.0	14051.250	3.362	3.362	.077%	.087%
1.0	14022.422	26.837	30.198	.612%	.780%
2.0	13907.109	53.224	83.422	1.213%	2.154%
3.0	13708.828	78.678	162.1	1.794%	4.185%
4.0	13424.766	102.693	264.794	2.341%	6.836%
5.0	12931.875	123.597	388.391	2.818%	10.026%
6.0	12338.438	141.432	529.823	3.225%	13.677%
7.0	11578.641	154.740	684.563	3.528%	17.672%
8.0	10609.172	161.916	846.479	3.692%	21.852%
9.0	9732.164	166.953	1013.431	3.806%	26.161%
10.0	8751.375	166.647	1180.079	3.800%	30.463%
11.0	7654.219	160.159	1340.238	3.652%	34.598%
12.0	6731.789	153.483	1493.721	3.499%	38.560%
13.0	5869.477	144.790	1638.511	3.301%	42.298%
14.0	5019.820	133.173	1771.684	3.036%	45.735%
15.0	4441.148	126.050	1897.734	2.874%	48.989%
16.0	3917.109	118.401	2016.135	2.700%	52.046%
17.0	3454.031	110.742	2126.877	2.525%	54.905%
18.0	3091.430	104.760	2231.637	2.388%	57.609%
19.0	2840.977	101.429	2333.066	2.313%	60.227%
20.0	2530.758	94.919	2427.985	2.164%	62.678%
21.0	2342.461	92.056	2520.041	2.099%	65.054%
22.0	2166.539	89.001	2609.042	2.029%	67.352%
23.0	2026.055	86.812	2695.854	1.979%	69.593%
24.0	1900.688	84.777	2780.631	1.933%	71.781%
25.0	1801.898	83.508	2864.139	1.904%	73.937%
26.0	1719.563	82.663	2946.802	1.885%	76.071%
27.0	1638.141	81.555	3028.357	1.859%	78.176%
28.0	1569.164	80.785	3109.142	1.842%	80.261%
29.0	1492.523	79.349	3188.491	1.809%	82.310%
30.0	1405.336	77.055	3265.546	1.757%	84.299%
31.0	1295.023	73.142	3338.689	1.668%	86.187%
32.0	1183.254	68.761	3407.449	1.568%	87.962%
33.0	1074.572	64.179	3471.629	1.463%	89.619%
34.0	974.060	59.731	3531.36	1.362%	91.161%
35.0	859.704	54.074	3585.434	1.233%	92.557%
36.0	728.993	46.989	3632.423	1.071%	93.770%
37.0	620.234	40.933	3673.355	.933%	94.826%

$\gamma(^{\circ})$	Average I(cd)	Zonal F(lm)	Sum F(lm)	Eff Flux(%)	Eff Sum(%)
38.0	505.076	34.100	3707.455	.777%	95.707%
39.0	384.947	26.566	3734.021	.606%	96.392%
40.0	290.798	20.498	3754.519	.467%	96.922%
41.0	203.147	14.615	3769.134	.333%	97.299%
42.0	127.863	9.382	3778.516	.214%	97.541%
43.0	72.035	5.387	3783.904	.123%	97.680%
44.0	44.691	3.404	3787.308	.078%	97.768%
45.0	32.077	2.487	3789.795	.057%	97.832%
46.0	28.301	2.232	3792.028	.051%	97.890%
47.0	26.269	2.107	3794.135	.048%	97.944%
48.0	25.031	2.040	3796.175	.047%	97.997%
49.0	24.574	2.034	3798.208	.046%	98.049%
50.0	24.258	2.038	3800.246	.046%	98.102%
51.0	23.892	2.036	3802.282	.046%	98.155%
52.0	23.632	2.042	3804.324	.047%	98.207%
53.0	23.393	2.049	3806.373	.047%	98.260%
54.0	23.147	2.054	3808.427	.047%	98.313%
55.0	22.929	2.060	3810.486	.047%	98.366%
56.0	22.718	2.065	3812.552	.047%	98.420%
57.0	22.380	2.058	3814.61	.047%	98.473%
58.0	22.008	2.047	3816.657	.047%	98.526%
59.0	21.537	2.024	3818.681	.046%	98.578%
60.0	20.890	1.984	3820.665	.045%	98.629%
61.0	20.257	1.943	3822.608	.044%	98.679%
62.0	19.765	1.914	3824.522	.044%	98.729%
63.0	19.174	1.873	3826.395	.043%	98.777%
64.0	18.710	1.844	3828.239	.042%	98.825%
65.0	18.295	1.818	3830.058	.041%	98.872%
66.0	17.916	1.795	3831.852	.041%	98.918%
67.0	17.726	1.789	3833.642	.041%	98.964%
68.0	17.564	1.786	3835.428	.041%	99.010%
69.0	17.452	1.787	3837.214	.041%	99.056%
70.0	17.374	1.790	3839.005	.041%	99.103%
71.0	17.269	1.791	3840.795	.041%	99.149%
72.0	17.198	1.794	3842.589	.041%	99.195%
73.0	17.135	1.797	3844.386	.041%	99.242%
74.0	17.079	1.800	3846.186	.041%	99.288%
75.0	17.002	1.801	3847.987	.041%	99.334%

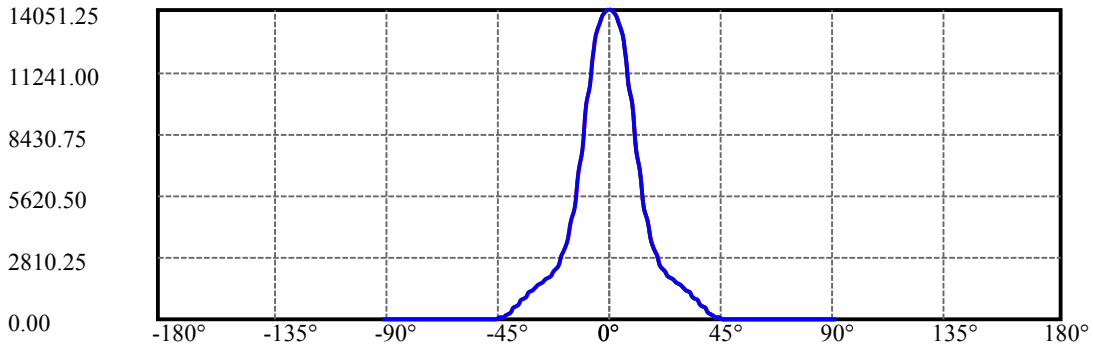
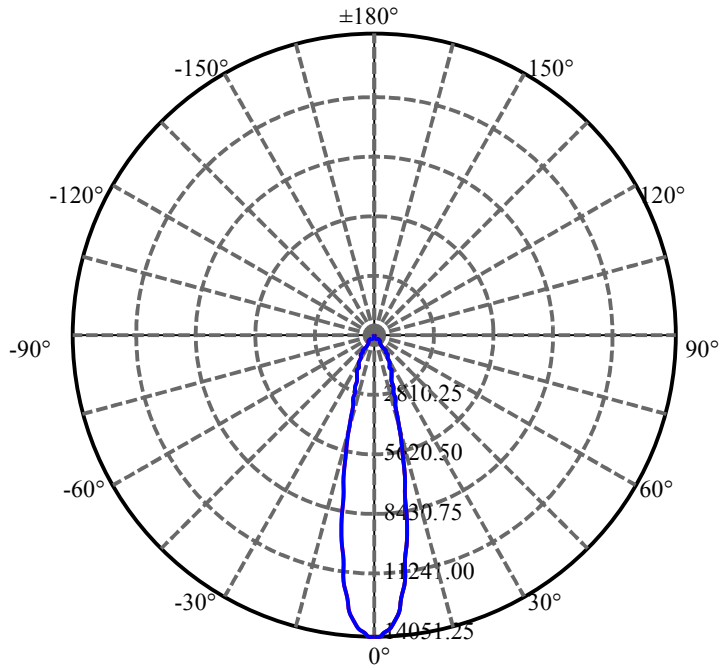
$\gamma(^{\circ})$	Average I(cd)	Zonal F(lm)	Sum F(lm)	Eff Flux(%)	Eff Sum(%)
76.0	16.952	1.804	3849.791	.041%	99.381%
77.0	16.882	1.804	3851.595	.041%	99.428%
78.0	16.805	1.803	3853.397	.041%	99.474%
79.0	16.692	1.797	3855.194	.041%	99.521%
80.0	16.615	1.794	3856.988	.041%	99.567%
81.0	16.538	1.791	3858.779	.041%	99.613%
82.0	16.453	1.787	3860.566	.041%	99.659%
83.0	16.369	1.782	3862.348	.041%	99.705%
84.0	16.277	1.775	3864.123	.040%	99.751%
85.0	16.207	1.771	3865.894	.040%	99.797%
86.0	16.130	1.764	3867.658	.040%	99.842%
87.0	16.045	1.757	3869.415	.040%	99.888%
88.0	15.975	1.751	3871.166	.040%	99.933%
89.0	15.827	1.735	3872.901	.040%	99.978%
90.0	15.799	0.866	3873.768	.020%	100.000%

ZONAL LUMEN SUMMARY

Zone	Lumens	%Lamp	%Fixt
0-30	3265.55	74.45%	84.30%
0-40	3754.52	85.60%	96.92%
0-60	3820.67	87.11%	98.63%
0-90	3872.90	88.30%	99.98%
0-120	3872.90	88.30%	99.98%
0-180	3873.77	88.32%	100.00%
60-90	54.22	1.24%	1.40%
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%
0-27.87	3099.01	70.66%	80.00%

ZONAL LUMEN SUMMARY

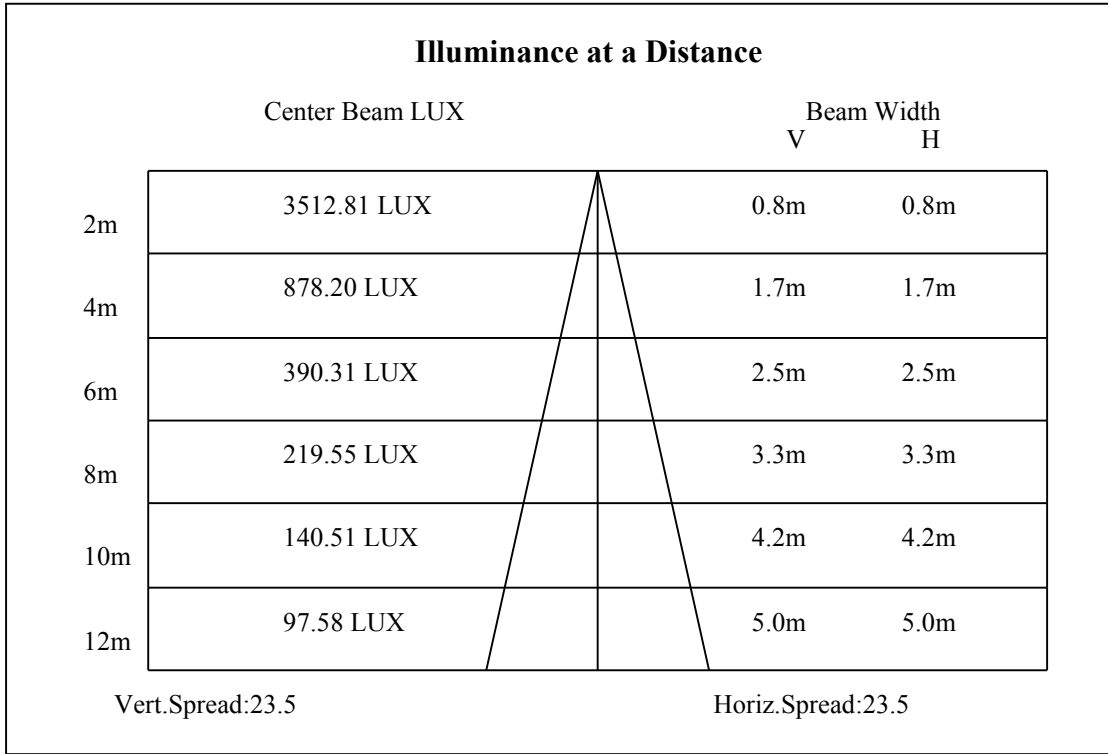
0-10	1180.08
10-20	1247.91
20-30	837.56
30-40	488.97
40-50	45.73
50-60	20.42
60-70	18.34
70-80	17.98
80-90	15.91
90-100	0.00
100-110	0.00
110-120	0.00
120-130	0.00
130-140	0.00
140-150	0.00
150-160	0.00
160-170	0.00
170-180	0.00

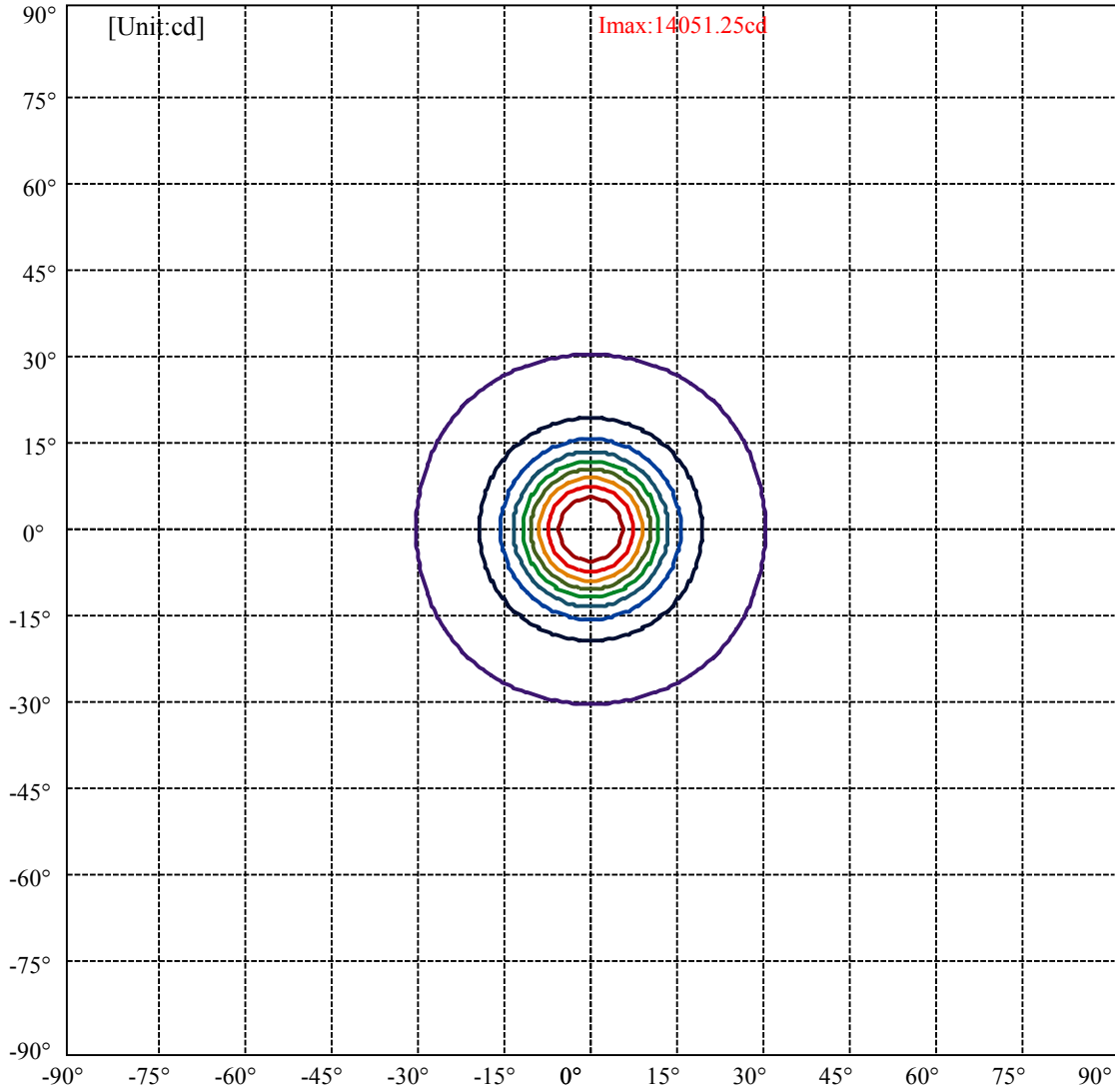


C0(Max): —————  
C0/C180: —————  
C90/C270: —————

Field angle(10%Imax):C0/180Left:30.0 Right:30.0  
:C90/270Left:30.0 Right:30.0

Beam Angle(50%Imax):C0/180Left:11.7 Right:11.7  
:C90/270Left:11.7 Right:11.7





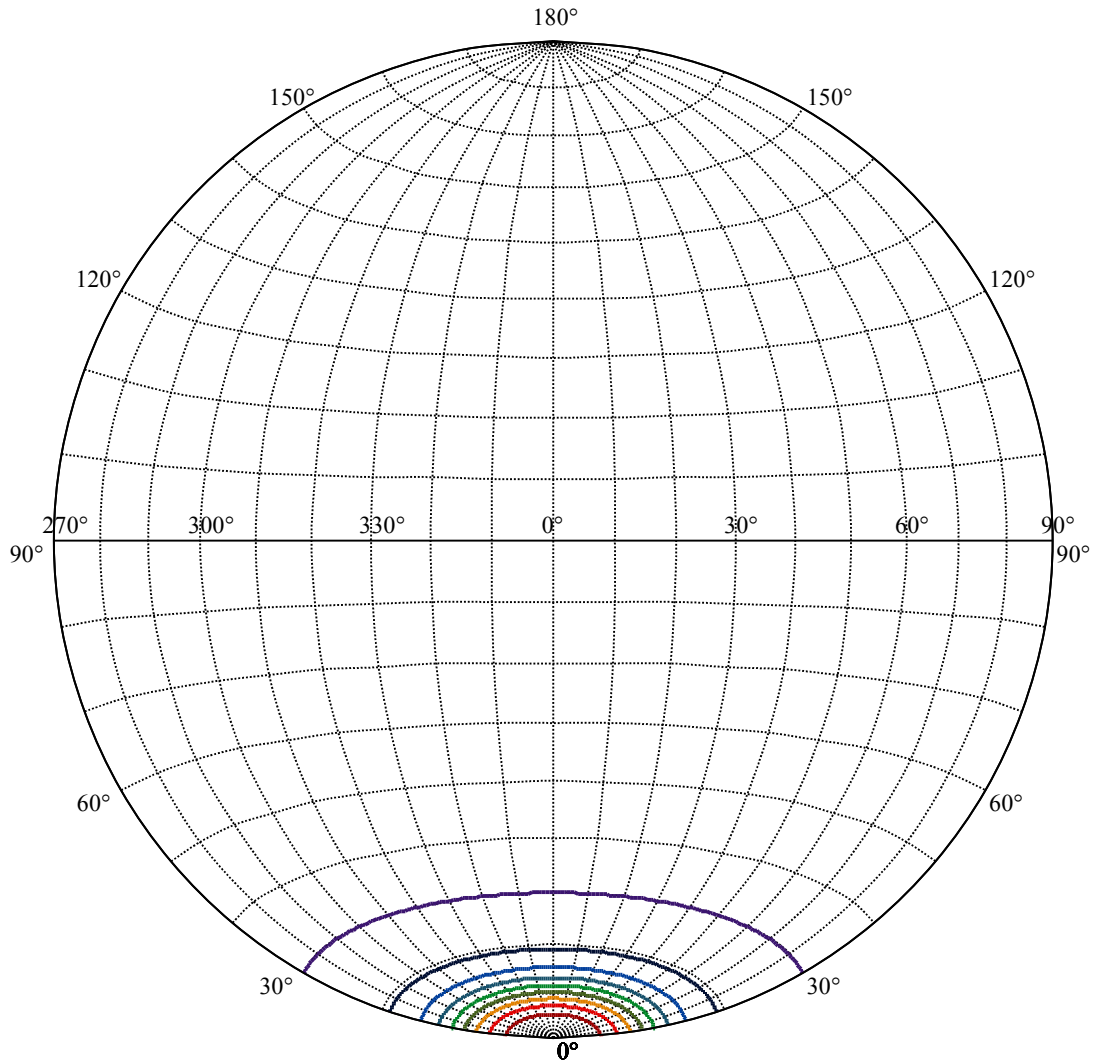
(10%Imax) 1405.13	—
(20%Imax) 2810.25	—
(30%Imax) 4215.38	—
(40%Imax) 5620.5	—
(50%Imax) 7025.63	—
(60%Imax) 8430.75	—
(70%Imax) 9835.88	—
(80%Imax) 11241	—
(90%Imax) 12646.1	—

Equipment:  
Temperature(°C): 25.0

Date: 2018/10/10  
Humidity(%): 60.0%

Operator: NT07  
Distance(m): 7.50





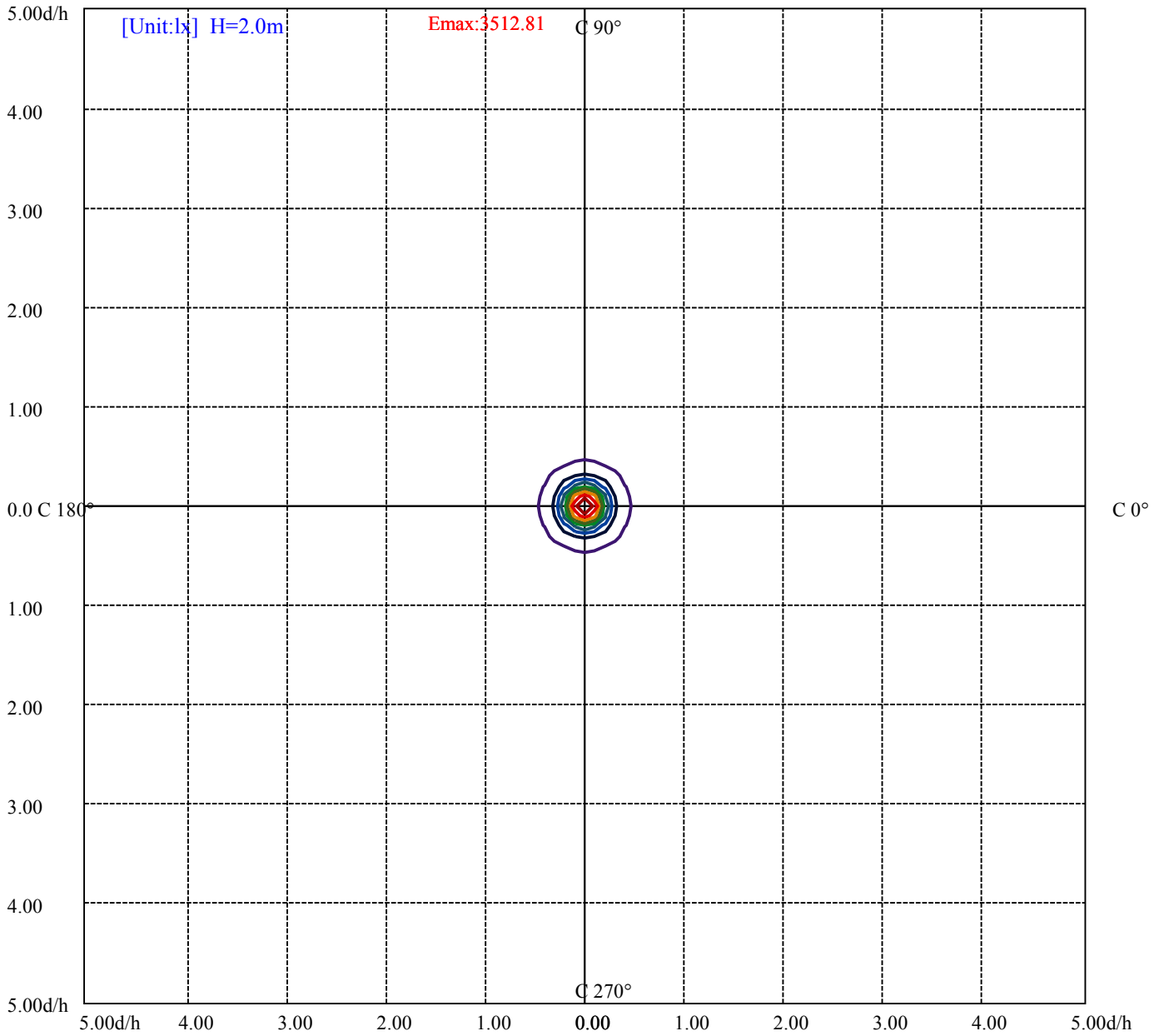
House

[Unit:cd]

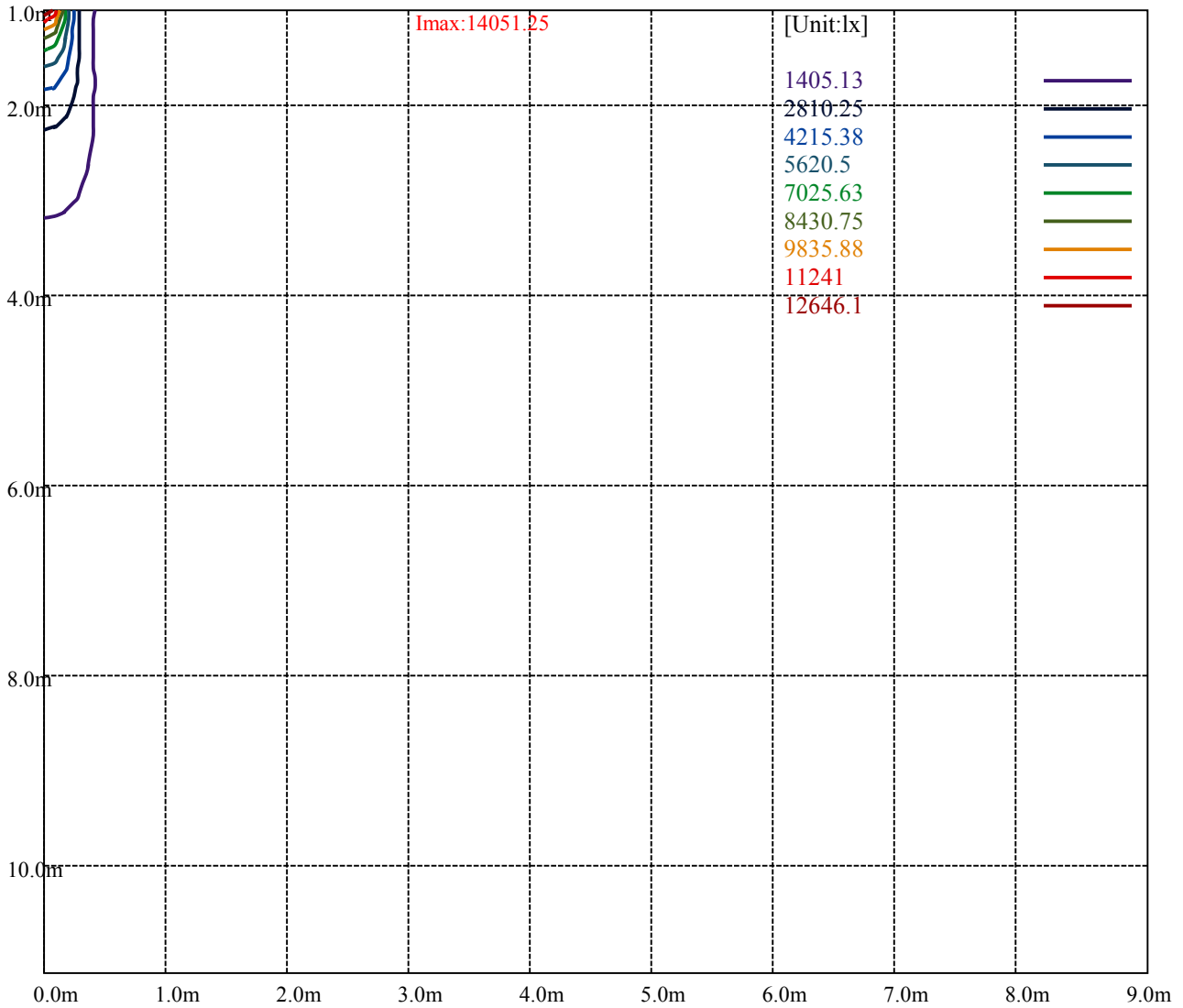
Road

**Imax:14051.25**

(10%Imax) 1405.13	—
(20%Imax) 2810.25	—
(30%Imax) 4215.38	—
(40%Imax) 5620.5	—
(50%Imax) 7025.63	—
(60%Imax) 8430.75	—
(70%Imax) 9835.88	—
(80%Imax) 11241	—
(90%Imax) 12646.1	—



(10%Emax) 351.28	—
(20%Emax) 702.5625	—
(30%Emax) 1053.843	—
(40%Emax) 1405.125	—
(50%Emax) 1756.405	—
(60%Emax) 2107.688	—
(70%Emax) 2458.968	—
(80%Emax) 2810.25	—
(90%Emax) 3161.525	—



Luminance Limiting Curve(no luminous side)

Luminance Table

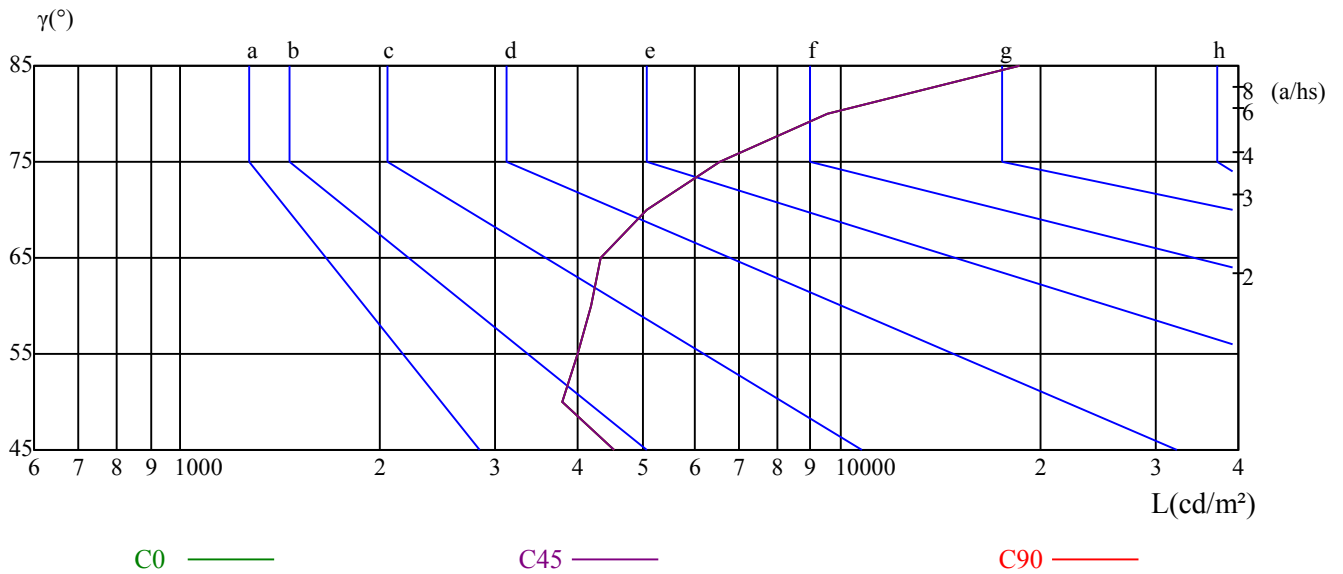
$\gamma$	45	50	55	60	65	70	75	80	85
C0	4536	3774	3998	4178	4329	5080	6569	9568	18595
C45	4536	3774	3998	4178	4329	5080	6569	9568	18595
C90	4536	3774	3998	4178	4329	5080	6569	9568	18595

L(Hor)(65)	L(Ver)(65)	L45(65)	L(Hor)(75)	L(Ver)(75)	L45(75)	L(Hor)(85)	L(Ver)(85)	L45(85)
4329	4329	4329	6569	6569	6569	18595	18595	18595

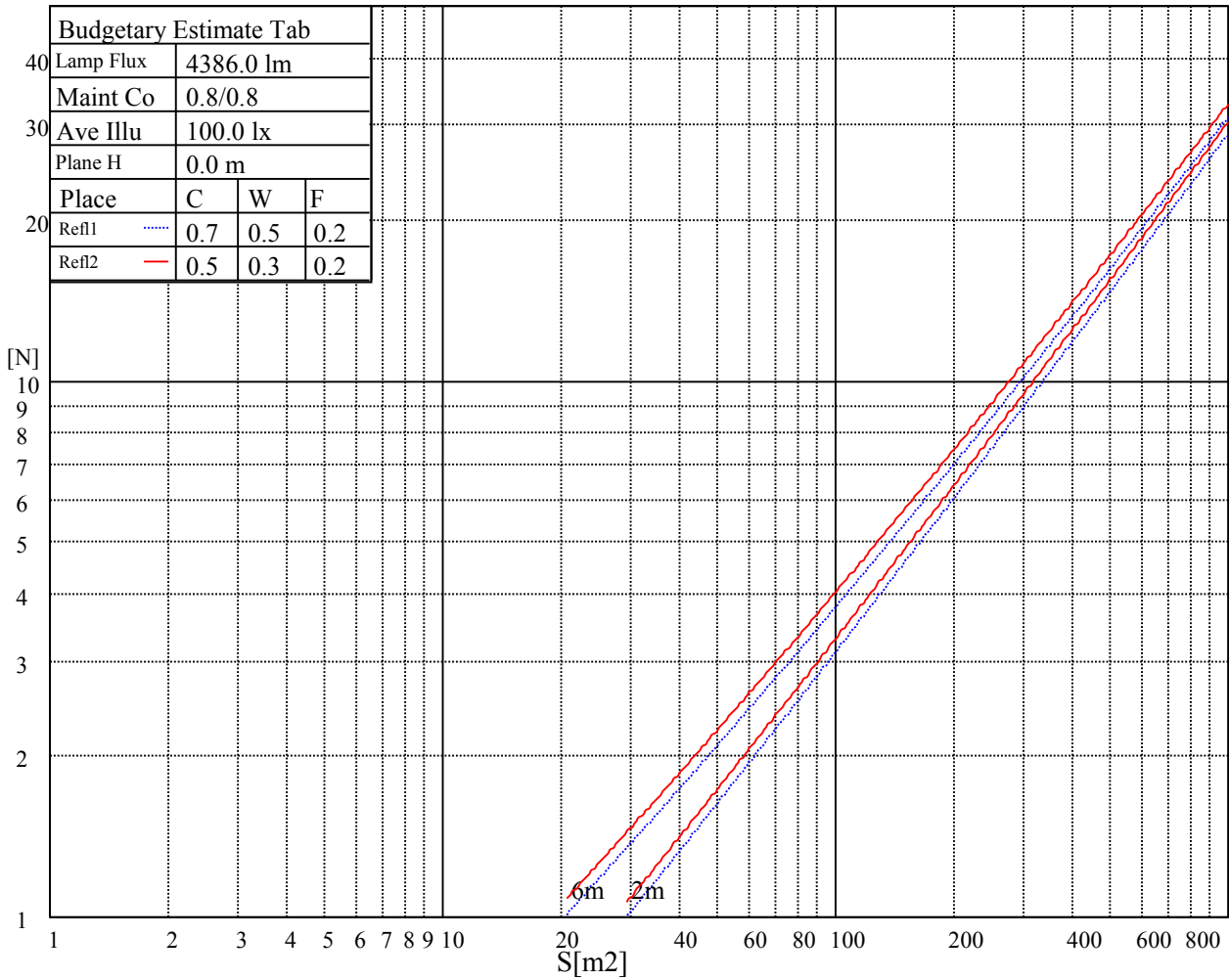
Glare Table

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

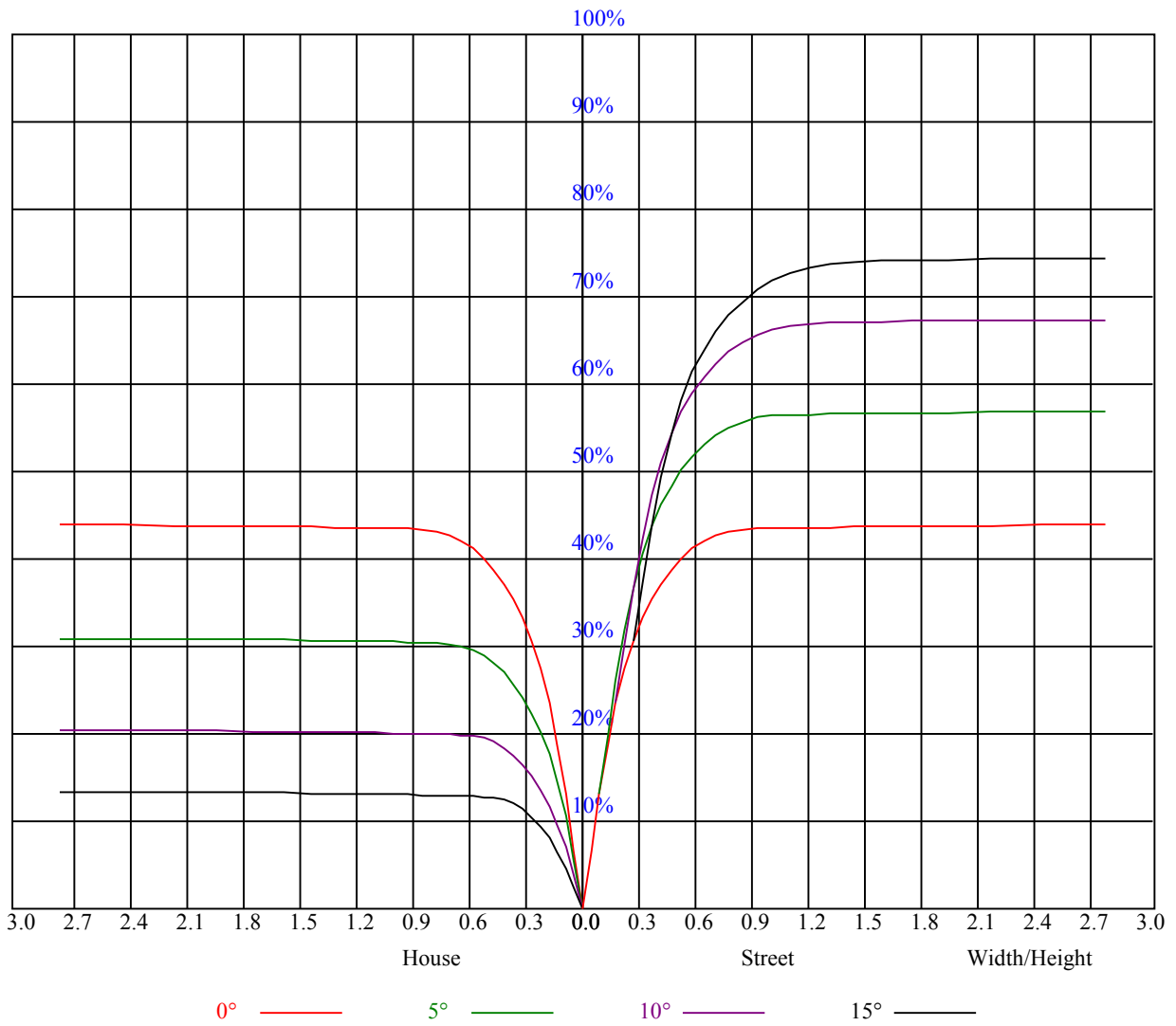
Luminance Limiting Curve



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	2.17	3.09	2.54	3.40	3.71	0.93	1.84	1.29	2.15	2.47
	3H	4.49	5.30	4.87	5.63	6.00	3.83	4.64	4.21	4.97	5.34
	4H	5.96	6.71	6.37	7.06	7.45	5.45	6.20	5.86	6.55	6.94
	6H	7.71	8.39	8.13	8.77	9.17	7.30	7.98	7.72	8.36	8.76
	8H	8.70	9.34	9.13	9.73	10.14	8.34	8.98	8.78	9.37	9.78
	12H	10.32	10.93	10.76	11.32	11.75	10.04	10.65	10.48	11.04	11.47
4H	2H	2.71	3.46	3.12	3.81	4.21	1.79	2.53	2.19	2.89	3.28
	3H	5.41	6.03	5.83	6.44	6.84	4.95	5.56	5.37	5.97	6.38
	4H	7.11	7.66	7.55	8.08	8.53	6.74	7.29	7.18	7.72	8.17
	6H	9.05	9.52	9.52	9.97	10.44	8.75	9.22	9.22	9.67	10.14
	8H	10.16	10.60	10.64	11.05	11.53	9.89	10.33	10.37	10.78	11.26
	12H	11.73	12.10	12.22	12.59	13.07	11.50	11.88	12.00	12.37	12.85
8H	4H	7.74	8.18	8.22	8.63	9.11	7.46	7.90	7.94	8.35	8.82
	6H	9.98	10.32	10.49	10.82	11.31	9.75	10.09	10.26	10.59	11.08
	8H	11.29	11.59	11.82	12.11	12.61	11.08	11.38	11.61	11.91	12.40
	12H	13.02	13.28	13.54	13.78	14.36	12.84	13.10	13.36	13.60	14.18
12H	4H	7.92	8.29	8.41	8.78	9.26	7.66	8.04	8.15	8.53	9.00
	6H	10.47	10.57	10.80	11.05	11.59	10.27	10.37	10.60	10.84	11.39
	8H	11.71	11.97	12.23	12.47	13.05	11.53	11.79	12.05	12.29	12.87
Variation with the observer position at spacings:											
S = 1.0H		5.2/-6.9					5.2/-6.9				
S = 1.5H		7.3/-5.2					7.3/-5.2				
S = 2.0H		8.6/-3.8					8.6/-3.8				
Standard tables:		BK3					BK3				
Uncorrected UGR		0.9					0.9				



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	1.05	1.05	1.05	1.03	1.03	1.03	0.98	0.98	0.98	0.94	0.94	0.94	0.90	0.90	0.90	0.88
1	0.99	0.97	0.95	0.97	0.95	0.94	0.93	0.92	0.91	0.90	0.89	0.88	0.87	0.86	0.85	0.84
2	0.93	0.90	0.88	0.92	0.89	0.87	0.89	0.87	0.85	0.86	0.85	0.83	0.84	0.83	0.81	0.80
3	0.88	0.85	0.82	0.87	0.84	0.81	0.85	0.82	0.80	0.83	0.81	0.79	0.81	0.79	0.78	0.76
4	0.84	0.80	0.77	0.83	0.80	0.77	0.81	0.78	0.76	0.80	0.77	0.75	0.78	0.76	0.74	0.73
5	0.80	0.76	0.73	0.80	0.76	0.73	0.78	0.75	0.72	0.77	0.74	0.72	0.76	0.73	0.71	0.70
6	0.77	0.73	0.70	0.76	0.72	0.69	0.75	0.72	0.69	0.74	0.71	0.69	0.73	0.70	0.68	0.67
7	0.74	0.70	0.67	0.73	0.69	0.66	0.72	0.69	0.66	0.71	0.68	0.66	0.71	0.68	0.66	0.65
8	0.71	0.67	0.64	0.71	0.67	0.64	0.70	0.66	0.64	0.69	0.66	0.63	0.68	0.65	0.63	0.62
9	0.69	0.64	0.62	0.68	0.64	0.61	0.67	0.64	0.61	0.67	0.63	0.61	0.66	0.63	0.61	0.60
10	0.66	0.62	0.59	0.66	0.62	0.59	0.65	0.62	0.59	0.65	0.61	0.59	0.64	0.61	0.59	0.58





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	14056.88	13955.63	13691.25	13359.38	12903.75	12133.13	11373.75	10513.13	9579.38
45.0	14073.75	14017.50	13848.75	13601.25	13258.13	12645.00	11992.50	11210.63	10215.00
90.0	14051.25	14011.88	13910.63	13708.13	13415.63	12954.38	12380.63	11158.88	10605.94
135.0	14023.13	14079.38	14073.75	14006.25	13882.50	13623.75	13230.00	12723.75	11975.63
180.0	14056.88	14101.88	14101.88	14034.38	13916.25	13663.13	13263.75	12746.25	11217.94
225.0	14073.75	14079.38	14034.38	13916.25	13713.75	13342.50	12892.50	12189.38	11184.75
270.0	14051.25	14028.75	13933.13	13758.75	13477.50	12960.00	12403.13	11688.75	10760.63
315.0	14023.13	13905.00	13663.13	13286.25	12830.63	12133.13	11171.25	10398.38	9334.13
360.0	14056.88	13955.63	13691.25	13359.38	12903.75	12133.13	11373.75	10513.13	9579.38
C/γ(°)	9.0	10.0	11.0	12.0	13.0	14.0	15.0	16.0	17.0
0.0	8398.13	7700.63	6463.13	5670.00	4916.25	4297.50	3836.25	3436.88	3071.25
45.0	9163.13	8201.25	7143.75	6249.38	5383.13	4674.38	4156.88	3656.25	3240.00
90.0	9662.06	8580.38	7528.50	6630.75	5806.13	4947.75	4388.06	3910.50	3406.50
135.0	11075.63	10164.38	9067.50	7965.00	7014.38	6035.63	5293.13	4590.00	4021.88
180.0	11102.63	10025.44	8915.63	7930.69	6980.06	5893.88	5153.63	4535.44	3967.31
225.0	10371.38	9281.25	8154.00	7170.19	6249.38	5169.38	4606.88	4066.88	3607.31
270.0	9714.38	8752.50	7666.88	6733.13	5765.63	4966.88	4370.63	3808.13	3341.25
315.0	8370.00	7305.19	6294.38	5505.19	4840.88	4173.19	3723.75	3332.81	2976.75
360.0	8398.13	7700.63	6463.13	5670.00	4916.25	4297.50	3836.25	3436.88	3071.25
C/γ(°)	18.0	19.0	20.0	21.0	22.0	23.0	24.0	25.0	26.0
0.0	2868.75	2565.56	2364.75	2214.56	2069.44	1971.00	1839.38	1760.06	1695.94
45.0	2913.75	2840.63	2402.44	2228.06	2075.06	1940.63	1819.69	1733.63	1654.31
90.0	3065.63	2784.94	2495.25	2307.38	2153.25	1993.50	1901.81	1798.88	1711.69
135.0	3560.63	3211.88	2851.88	2724.19	2401.88	2265.19	2064.94	1952.44	1860.19
180.0	3479.63	3131.44	2802.38	2532.94	2338.88	2163.38	2029.50	1902.94	1797.75
225.0	3147.19	2849.63	2598.75	2347.31	2186.44	2030.63	1917.00	1810.69	1731.38
270.0	3003.75	2863.13	2444.63	2257.88	2099.81	1957.50	1834.31	1739.81	1661.63
315.0	2692.13	2480.63	2286.00	2127.38	2007.56	1886.63	1798.88	1716.75	1643.63
360.0	2868.75	2565.56	2364.75	2214.56	2069.44	1971.00	1839.38	1760.06	1695.94
C/γ(°)	27.0	28.0	29.0	30.0	31.0	32.0	33.0	34.0	35.0
0.0	1601.44	1530.00	1451.81	1333.69	1220.63	1102.50	993.94	882.56	767.81
45.0	1582.31	1524.94	1442.81	1360.13	1252.69	1147.50	1044.00	924.75	808.88
90.0	1647.00	1581.75	1500.75	1417.50	1323.00	1115.21	1089.84	984.83	877.28
135.0	1743.75	1674.00	1614.94	1533.38	1443.38	1363.50	1240.31	1135.13	1024.88
180.0	1719.56	1643.06	1568.25	1501.31	1416.94	1295.44	1111.56	1084.56	948.88
225.0	1654.88	1591.31	1519.31	1427.63	1334.25	1196.44	1106.89	1001.25	891.84
270.0	1576.69	1512.56	1450.13	1359.56	1257.75	1161.00	1053.00	937.69	833.63
315.0	1579.50	1495.69	1392.19	1309.50	1111.56	1084.44	957.04	841.73	724.44
360.0	1601.44	1530.00	1451.81	1333.69	1220.63	1102.50	993.94	882.56	767.81
C/γ(°)	36.0	37.0	38.0	39.0	40.0	41.0	42.0	43.0	44.0
0.0	623.81	512.44	402.75	288.00	187.65	118.29	54.90	34.37	29.70
45.0	704.25	603.56	474.75	378.00	291.94	195.30	113.29	67.39	49.39
90.0	739.86	630.84	522.34	392.79	296.55	212.46	132.19	71.38	45.06
135.0	879.19	767.81	650.81	518.63	407.81	308.81	229.95	124.03	73.01
180.0	838.86	727.99	605.93	485.27	381.94	273.21	189.34	110.59	52.82
225.0	754.54	647.61	540.11	407.31	310.28	221.85	137.64	71.38	36.62
270.0	713.81	605.25	485.44	371.81	291.38	197.83	114.69	65.53	43.03
315.0	577.63	466.37	358.48	237.77	158.85	97.43	50.91	31.61	27.90
360.0	623.81	512.44	402.75	288.00	187.65	118.29	54.90	34.37	29.70

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	22.84	21.94	21.49	21.09	20.76	20.59	20.42	20.19	20.03
45.0	41.06	35.33	33.24	31.56	30.83	30.26	29.59	29.08	28.52
90.0	38.14	31.61	29.64	29.03	28.63	28.29	27.90	27.68	27.39
135.0	34.43	28.18	24.13	20.98	20.59	20.25	19.80	19.63	19.46
180.0	29.53	25.48	21.94	20.64	20.19	19.74	19.41	19.13	18.96
225.0	29.03	26.38	24.75	24.47	24.36	24.13	23.91	23.68	23.57
270.0	38.42	35.10	33.13	31.11	30.21	30.09	29.76	29.48	29.14
315.0	23.18	22.39	21.83	21.38	21.04	20.70	20.36	20.19	20.08
360.0	22.84	21.94	21.49	21.09	20.76	20.59	20.42	20.19	20.03
C/γ(°)	54.0	55.0	56.0	57.0	58.0	59.0	60.0	61.0	62.0
0.0	19.80	19.69	19.58	19.35	19.24	19.13	19.01	18.84	18.62
45.0	28.13	27.68	27.06	26.27	25.43	24.30	22.95	21.77	20.98
90.0	27.17	26.89	26.66	26.04	25.31	24.36	23.40	22.16	21.38
135.0	19.35	19.18	19.07	19.01	19.01	19.01	18.90	18.84	18.73
180.0	18.68	18.51	18.34	18.23	18.11	18.11	18.00	17.94	17.89
225.0	23.40	23.29	23.29	23.18	22.95	22.61	21.94	21.26	20.59
270.0	28.69	28.29	27.73	26.83	25.88	24.64	23.06	21.71	20.76
315.0	19.97	19.91	20.03	20.14	20.14	20.14	19.86	19.52	19.18
360.0	19.80	19.69	19.58	19.35	19.24	19.13	19.01	18.84	18.62
C/γ(°)	63.0	64.0	65.0	66.0	67.0	68.0	69.0	70.0	71.0
0.0	18.39	18.11	17.83	17.55	17.33	17.16	17.04	16.93	16.76
45.0	19.86	19.18	18.51	18.11	17.89	17.78	17.66	17.55	17.44
90.0	20.31	19.58	18.90	18.45	18.23	18.11	18.00	17.89	17.83
135.0	18.62	18.45	18.28	18.06	17.83	17.55	17.38	17.27	17.10
180.0	17.83	17.78	17.72	17.61	17.55	17.44	17.27	17.21	17.04
225.0	20.03	19.41	18.90	18.28	18.06	17.89	17.83	17.83	17.83
270.0	19.63	18.84	18.34	17.72	17.61	17.49	17.44	17.38	17.33
315.0	18.73	18.34	17.89	17.55	17.33	17.10	16.99	16.93	16.82
360.0	18.39	18.11	17.83	17.55	17.33	17.16	17.04	16.93	16.76
C/γ(°)	72.0	73.0	74.0	75.0	76.0	77.0	78.0	79.0	80.0
0.0	16.71	16.59	16.54	16.43	16.37	16.37	16.31	16.26	16.20
45.0	17.33	17.27	17.16	17.04	16.93	16.88	16.76	16.65	16.59
90.0	17.78	17.72	17.66	17.61	17.61	17.55	17.44	17.27	17.16
135.0	17.04	16.99	16.93	16.82	16.76	16.71	16.59	16.48	16.43
180.0	16.93	16.88	16.82	16.76	16.65	16.54	16.48	16.31	16.26
225.0	17.83	17.83	17.83	17.83	17.83	17.72	17.66	17.55	17.38
270.0	17.27	17.21	17.16	17.10	17.04	16.93	16.82	16.71	16.65
315.0	16.71	16.59	16.54	16.43	16.43	16.37	16.37	16.31	16.26
360.0	16.71	16.59	16.54	16.43	16.37	16.37	16.31	16.26	16.20
C/γ(°)	81.0	82.0	83.0	84.0	85.0	86.0	87.0	88.0	89.0
0.0	16.14	16.14	16.09	16.03	15.98	15.92	15.86	15.75	15.58
45.0	16.54	16.48	16.37	16.31	16.20	16.09	16.03	15.92	15.81
90.0	17.04	16.88	16.71	16.54	16.43	16.31	16.20	16.20	15.81
135.0	16.37	16.31	16.26	16.26	16.20	16.14	16.09	16.03	15.98
180.0	16.20	16.14	16.14	16.09	16.09	16.03	15.92	15.92	15.86
225.0	17.21	16.99	16.82	16.59	16.43	16.31	16.20	16.09	16.03
270.0	16.54	16.48	16.43	16.31	16.26	16.20	16.09	15.98	15.86
315.0	16.26	16.20	16.14	16.09	16.09	16.03	15.98	15.92	15.69
360.0	16.14	16.14	16.09	16.03	15.98	15.92	15.86	15.75	15.58

Intensity data(cd)

C/ $\gamma$ (°)	90.0
0.0	15.58
45.0	15.81
90.0	15.75
135.0	15.92
180.0	15.86
225.0	15.92
270.0	15.81
315.0	15.75
360.0	15.58