



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

---

## NATA

---

LumCAT: 1420-E	
Luminaire: 92.70.046.00	
Report No: NATA0100	Voltage(V): 35.5000
Test No: GC2019010213	Current(A): 0.3000
LampCAT: CREE CXA1512	Power (W): 10.6500
Lamp flux(lm): 1552.0	PF: 0.0000
Number of Lamps: 1	Ballast type: DC
Length(mm): 41	Width(mm): 41
Phm Type: C	Height(mm): 0

---

## Photometric Results

---

Lumens(lm): 1312.02  
Efficiency(%): 84.54%  
Lumens(lm)/Power(W): 123.37  
Central intensity(cd): 8051.203  
Maximum intensity(cd): 8051.203  
Angle of maximum intensity: C=0.0  $\gamma$ =0.0  
Beam Angle(50%Imax): [C0/180]Total=17.8  
                                  [C90/270]Total=17.8  
Field angle(10%Imax): [C0/180]Total=43.1  
                                  [C90/270]Total=43.1  
Maximum s/h(1/2): C0\_180=0.31 C90\_270=0.31  
Maximum s/h(1/4): C0\_180=0.32 C90\_270=0.32  
Up flux rate of lamp(%): 0.00%  
Down flux rate of lamp(%): 84.66%  
Up flux rate of LUM(%): - -  
Down flux rate of LUM(%): 100.00%  
CIE Type : Direct lighting  
Output flux ratio in  $\pi$  solid angle : 98.335%

$\gamma(^{\circ})$	Average I(cd)	Zonal F(lm)	Sum F(lm)	Eff Flux(%)	Eff Sum(%)
0.0	8051.203	1.926	1.926	.124%	.147%
1.0	8000.789	15.312	17.238	.987%	1.314%
2.0	7841.320	30.010	47.248	1.934%	3.601%
3.0	7540.102	43.274	90.522	2.788%	6.899%
4.0	7121.602	54.477	144.999	3.510%	11.052%
5.0	6581.883	62.907	207.906	4.053%	15.846%
6.0	5956.875	68.282	276.188	4.400%	21.051%
7.0	5226.328	69.846	346.034	4.500%	26.374%
8.0	4600.055	70.205	416.24	4.524%	31.725%
9.0	3965.484	68.027	484.266	4.383%	36.910%
10.0	3368.320	64.141	548.407	4.133%	41.799%
11.0	2922.609	61.154	609.561	3.940%	46.460%
12.0	2520.914	57.476	667.037	3.703%	50.841%
13.0	2148.891	53.010	720.047	3.416%	54.881%
14.0	1855.828	49.234	769.281	3.172%	58.633%
15.0	1616.063	45.868	815.148	2.955%	62.129%
16.0	1399.852	42.313	857.461	2.726%	65.354%
17.0	1236.424	39.642	897.103	2.554%	68.376%
18.0	1102.352	37.355	934.458	2.407%	71.223%
19.0	992.391	35.430	969.889	2.283%	73.923%
20.0	910.772	34.160	1004.048	2.201%	76.527%
21.0	839.475	32.990	1037.039	2.126%	79.042%
22.0	778.605	31.985	1069.024	2.061%	81.479%
23.0	721.638	30.921	1099.945	1.992%	83.836%
24.0	657.738	29.337	1129.282	1.890%	86.072%
25.0	576.548	26.720	1156.002	1.722%	88.109%
26.0	502.066	24.135	1180.137	1.555%	89.948%
27.0	419.442	20.882	1201.019	1.345%	91.540%
28.0	334.371	17.214	1218.233	1.109%	92.852%
29.0	262.849	13.974	1232.208	.900%	93.917%
30.0	202.458	11.101	1243.308	.715%	94.763%
31.0	131.639	7.435	1250.743	.479%	95.330%
32.0	86.738	5.040	1255.784	.325%	95.714%
33.0	58.198	3.476	1259.26	.224%	95.979%
34.0	41.140	2.523	1261.782	.163%	96.171%
35.0	33.933	2.134	1263.917	.138%	96.334%
36.0	29.348	1.892	1265.808	.122%	96.478%
37.0	25.699	1.696	1267.505	.109%	96.607%

$\gamma(^{\circ})$	Average I(cd)	Zonal F(lm)	Sum F(lm)	Eff Flux(%)	Eff Sum(%)
38.0	22.929	1.548	1269.053	.100%	96.725%
39.0	21.431	1.479	1270.532	.095%	96.838%
40.0	20.138	1.419	1271.951	.091%	96.946%
41.0	19.090	1.373	1273.324	.088%	97.051%
42.0	18.070	1.326	1274.65	.085%	97.152%
43.0	17.023	1.273	1275.923	.082%	97.249%
44.0	16.221	1.236	1277.159	.080%	97.343%
45.0	15.398	1.194	1278.353	.077%	97.434%
46.0	14.590	1.151	1279.504	.074%	97.522%
47.0	13.859	1.111	1280.616	.072%	97.607%
48.0	13.184	1.074	1281.69	.069%	97.688%
49.0	12.417	1.028	1282.718	.066%	97.767%
50.0	11.770	0.989	1283.706	.064%	97.842%
51.0	11.201	0.955	1284.661	.062%	97.915%
52.0	10.617	0.917	1285.578	.059%	97.985%
53.0	10.097	0.884	1286.463	.057%	98.052%
54.0	9.633	0.855	1287.317	.055%	98.117%
55.0	9.225	0.829	1288.146	.053%	98.180%
56.0	8.880	0.807	1288.953	.052%	98.242%
57.0	8.578	0.789	1289.742	.051%	98.302%
58.0	8.304	0.772	1290.514	.050%	98.361%
59.0	8.065	0.758	1291.273	.049%	98.419%
60.0	7.882	0.749	1292.021	.048%	98.476%
61.0	7.685	0.737	1292.758	.047%	98.532%
62.0	7.552	0.731	1293.489	.047%	98.588%
63.0	7.404	0.723	1294.213	.047%	98.643%
64.0	7.263	0.716	1294.929	.046%	98.697%
65.0	7.137	0.709	1295.638	.046%	98.752%
66.0	7.038	0.705	1296.343	.045%	98.805%
67.0	6.933	0.700	1297.043	.045%	98.859%
68.0	6.863	0.698	1297.741	.045%	98.912%
69.0	6.757	0.692	1298.432	.045%	98.965%
70.0	6.722	0.693	1299.125	.045%	99.017%
71.0	6.645	0.689	1299.814	.044%	99.070%
72.0	6.574	0.686	1300.5	.044%	99.122%
73.0	6.525	0.684	1301.184	.044%	99.174%
74.0	6.455	0.680	1301.864	.044%	99.226%
75.0	6.398	0.678	1302.542	.044%	99.278%

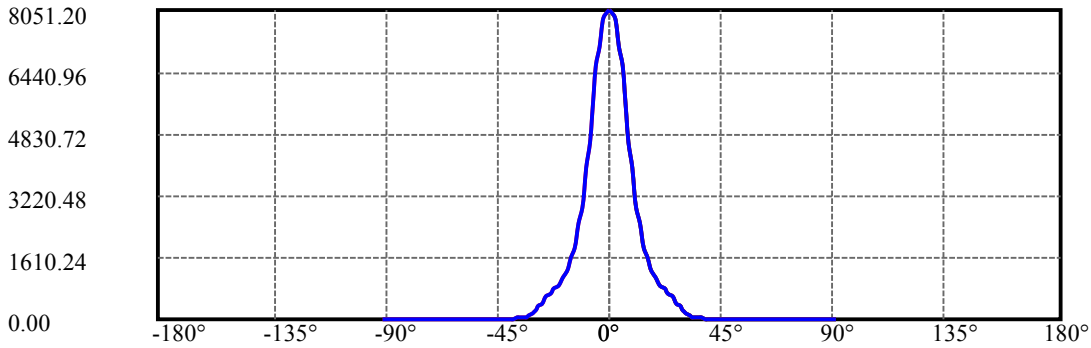
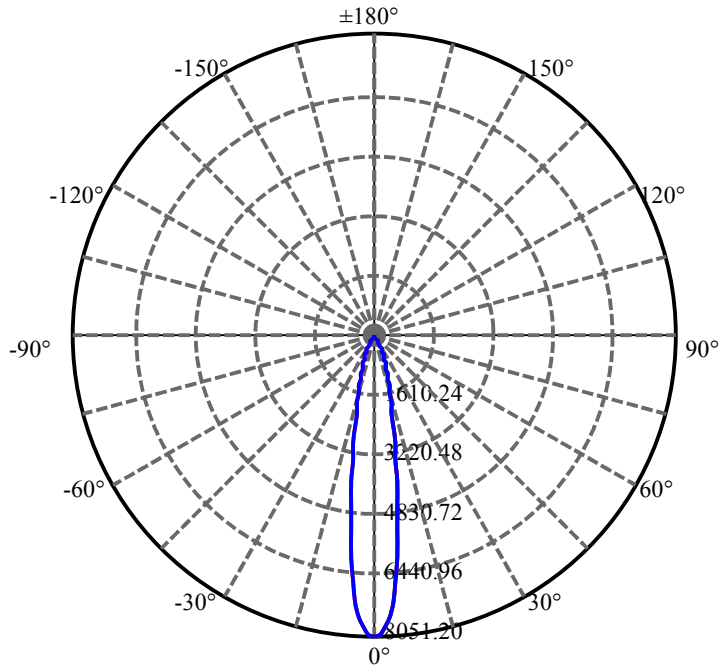
$\gamma(^{\circ})$	Average I(cd)	Zonal F(lm)	Sum F(lm)	Eff Flux(%)	Eff Sum(%)
76.0	6.328	0.673	1303.215	.043%	99.329%
77.0	6.286	0.672	1303.887	.043%	99.380%
78.0	6.230	0.668	1304.555	.043%	99.431%
79.0	6.202	0.668	1305.223	.043%	99.482%
80.0	6.152	0.664	1305.887	.043%	99.533%
81.0	6.096	0.660	1306.548	.043%	99.583%
82.0	6.075	0.660	1307.207	.043%	99.633%
83.0	6.019	0.655	1307.862	.042%	99.683%
84.0	5.998	0.654	1308.516	.042%	99.733%
85.0	5.970	0.652	1309.169	.042%	99.783%
86.0	5.906	0.646	1309.815	.042%	99.832%
87.0	5.787	0.634	1310.448	.041%	99.880%
88.0	5.752	0.630	1311.079	.041%	99.928%
89.0	5.723	0.628	1311.706	.040%	99.976%
90.0	5.688	0.312	1312.018	.020%	100.000%

ZONAL LUMEN SUMMARY

Zone	Lumens	%Lamp	%Fixt
0-30	1243.31	80.11%	94.76%
0-40	1271.95	81.96%	96.95%
0-60	1292.02	83.25%	98.48%
0-90	1311.71	84.52%	99.98%
0-120	1311.71	84.52%	99.98%
0-180	1312.02	84.54%	100.00%
60-90	20.43	1.32%	1.56%
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%
0-21.39	1049.62	67.63%	80.00%

ZONAL LUMEN SUMMARY

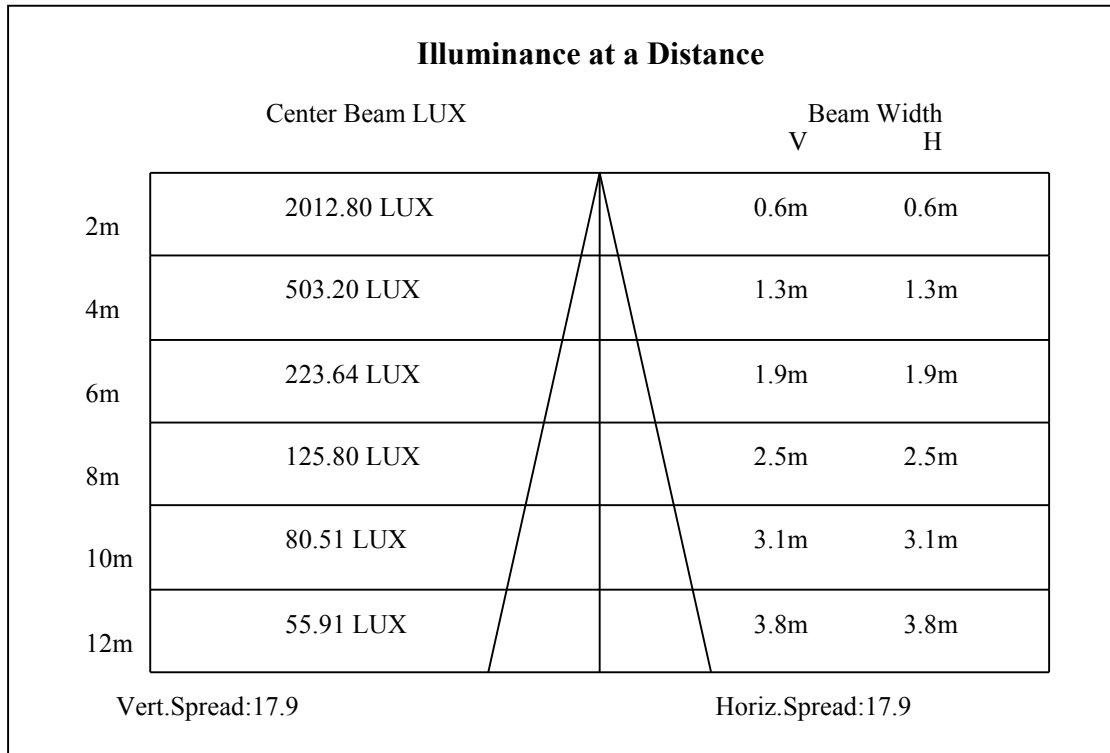
0-10	548.41
10-20	455.64
20-30	239.26
30-40	28.64
40-50	11.76
50-60	8.31
60-70	7.10
70-80	6.76
80-90	5.82
90-100	0.00
100-110	0.00
110-120	0.00
120-130	0.00
130-140	0.00
140-150	0.00
150-160	0.00
160-170	0.00
170-180	0.00

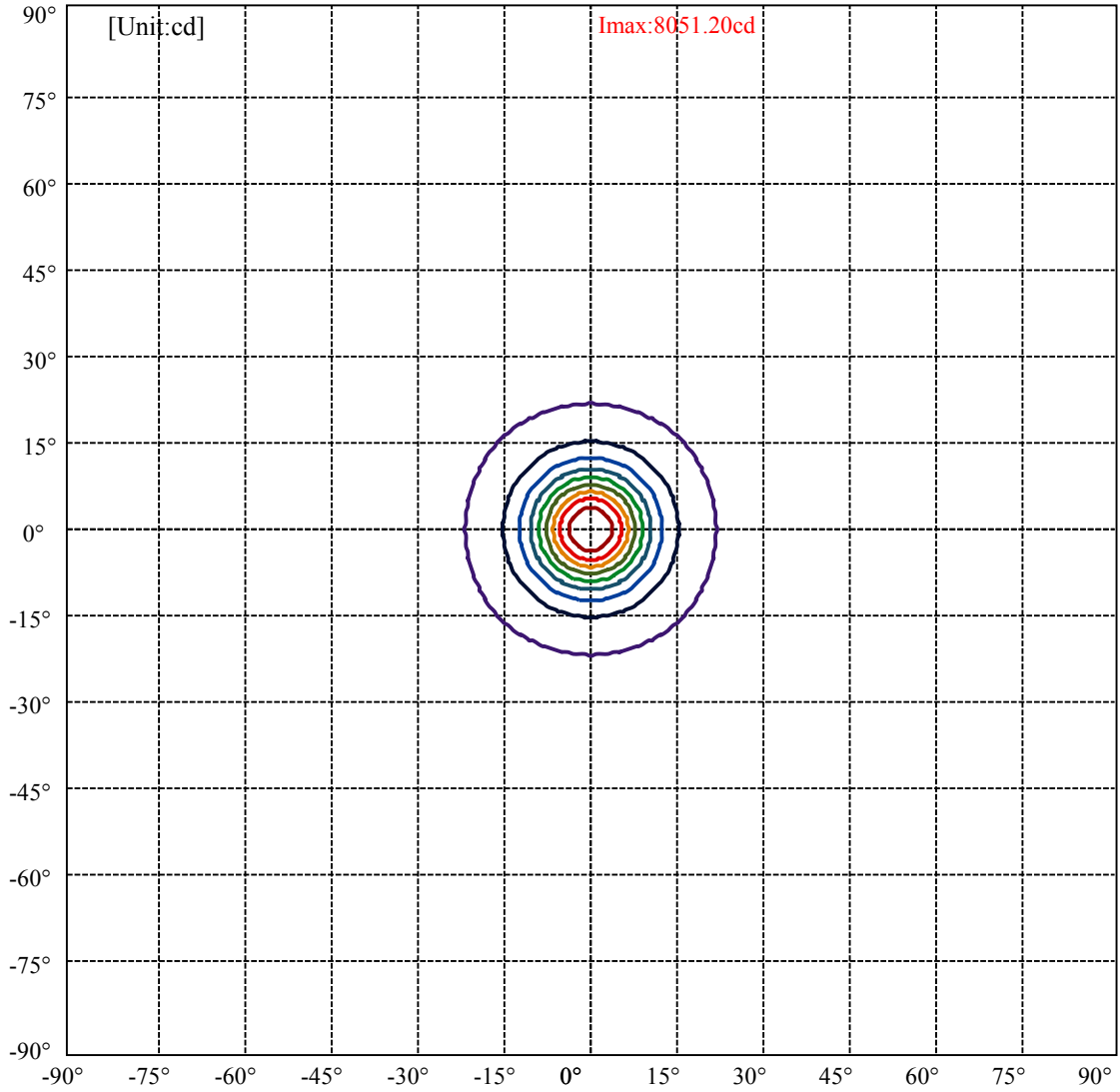


C0(Max): —————  
C0/C180: —————  
C90/C270: —————

Field angle(10%Imax):C0/180Left:21.6 Right:21.6  
:C90/270Left:21.6 Right:21.6

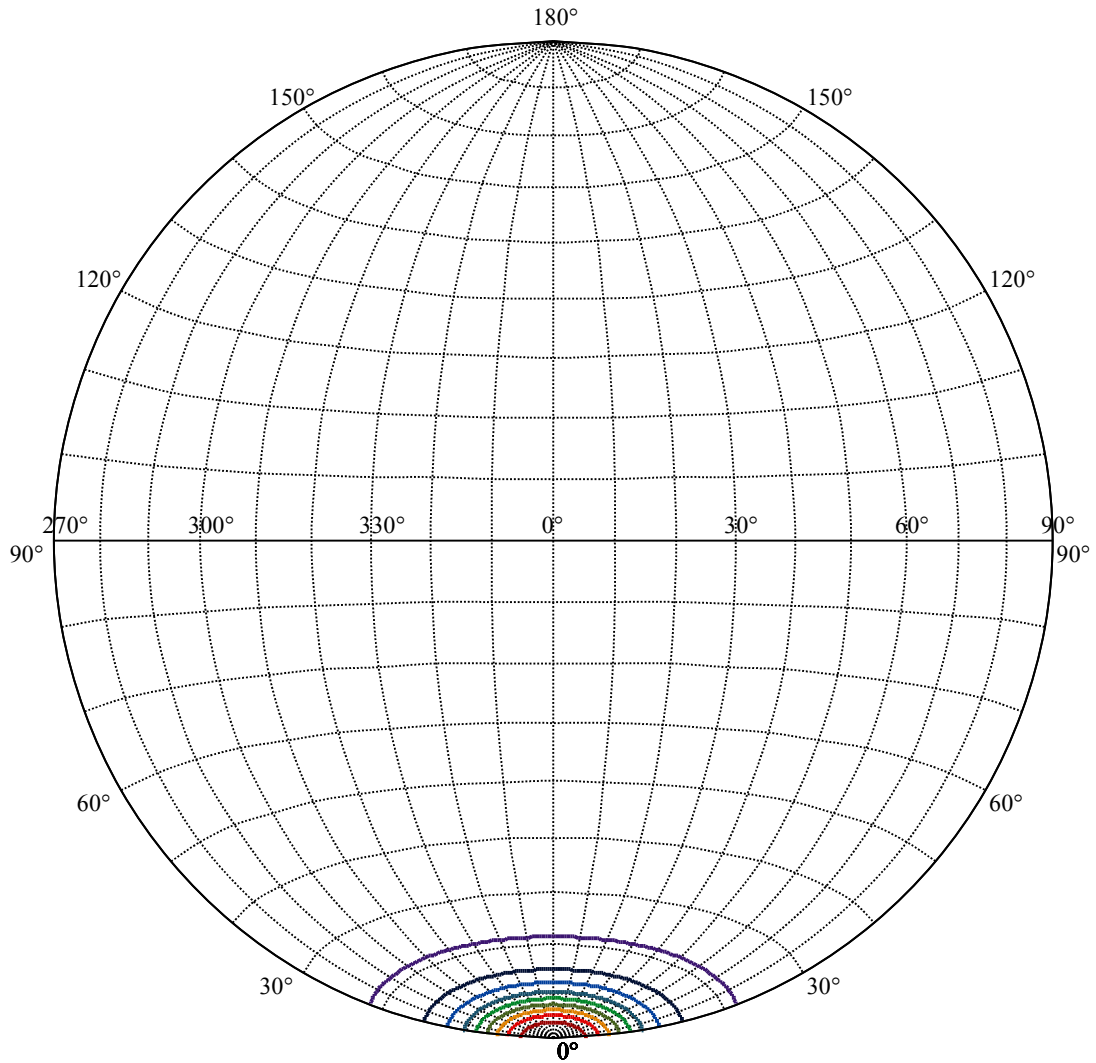
Beam Angle(50%Imax):C0/180Left:8.9 Right:8.9  
:C90/270Left:8.9 Right:8.9





(10%Imax) 805.12	—
(20%Imax) 1610.24	—
(30%Imax) 2415.36	—
(40%Imax) 3220.48	—
(50%Imax) 4025.6	—
(60%Imax) 4830.72	—
(70%Imax) 5635.84	—
(80%Imax) 6440.96	—
(90%Imax) 7246.08	—





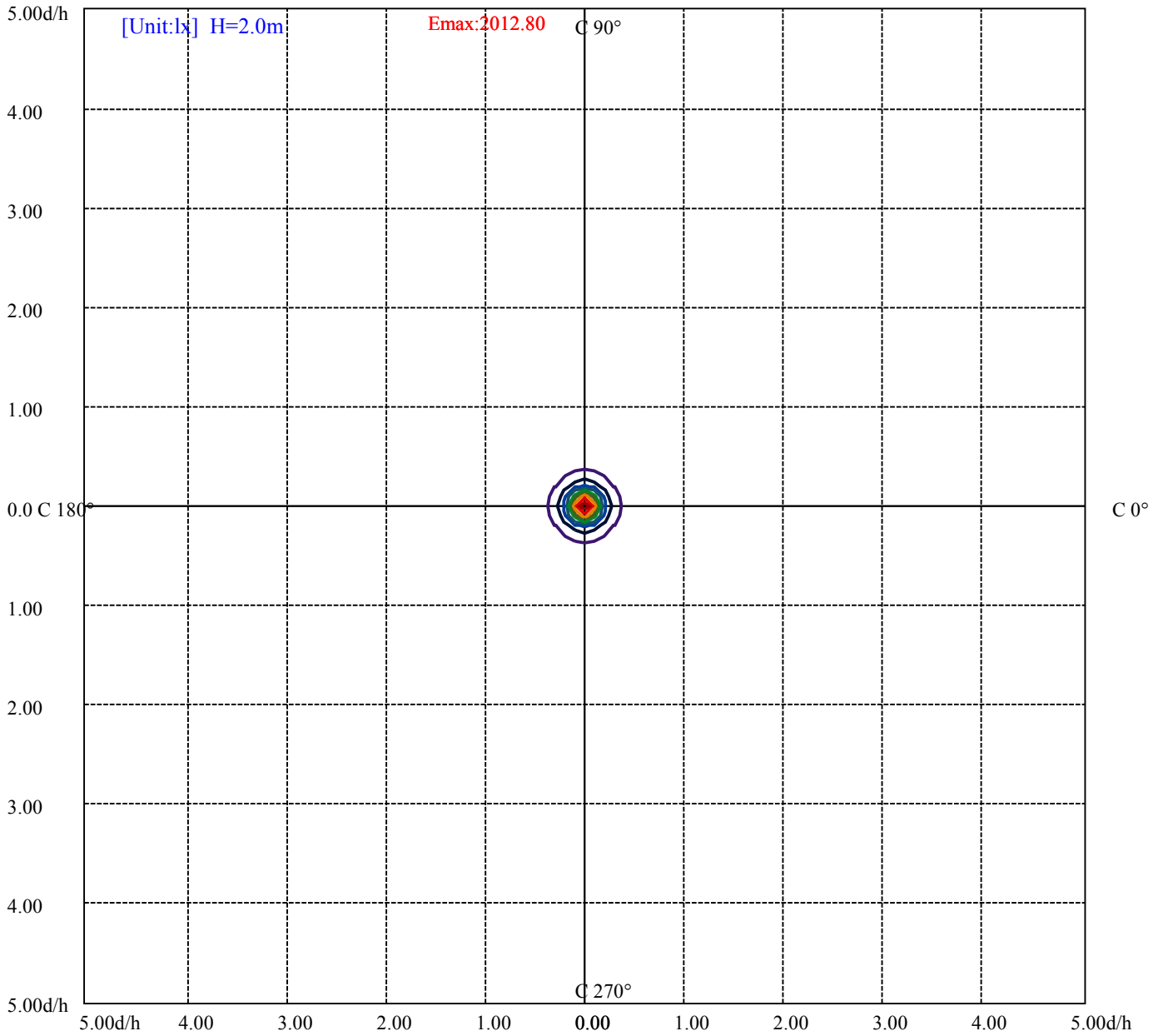
House

[Unit:cd]

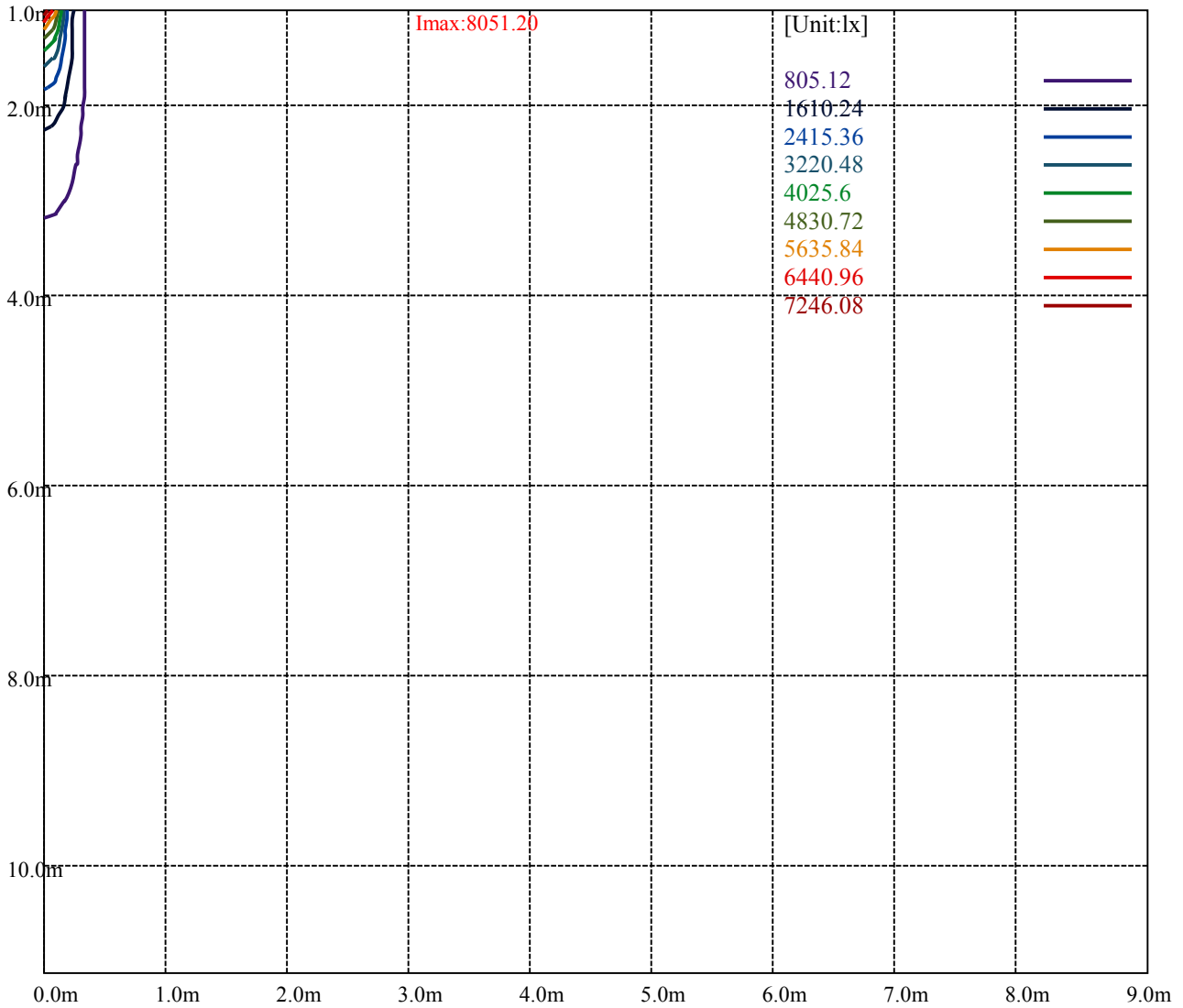
Road

**Imax:8051.20**

(10%Imax) 805.12	—
(20%Imax) 1610.24	—
(30%Imax) 2415.36	—
(40%Imax) 3220.48	—
(50%Imax) 4025.6	—
(60%Imax) 4830.72	—
(70%Imax) 5635.84	—
(80%Imax) 6440.96	—
(90%Imax) 7246.08	—



(10%Emax) 201.28	—
(20%Emax) 402.56	—
(30%Emax) 603.84	—
(40%Emax) 805.12	—
(50%Emax) 1006.4	—
(60%Emax) 1207.68	—
(70%Emax) 1408.96	—
(80%Emax) 1610.24	—
(90%Emax) 1811.52	—



Luminance Table

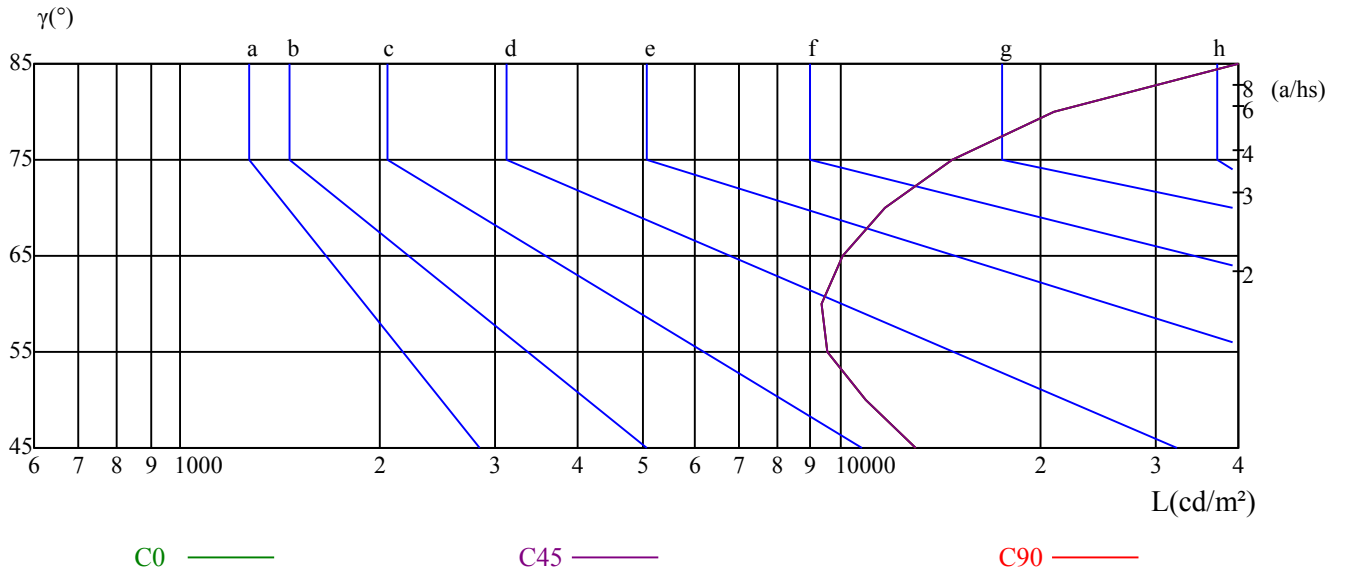
$\gamma$	45	50	55	60	65	70	75	80	85
C0	12955	10893	9568	9378	10046	11692	14707	21077	40745
C45	12955	10893	9568	9378	10046	11692	14707	21077	40745
C90	12955	10893	9568	9378	10046	11692	14707	21077	40745

L(Hor)(65)	L(Ver)(65)	L45(65)	L(Hor)(75)	L(Ver)(75)	L45(75)	L(Hor)(85)	L(Ver)(85)	L45(85)
10046	10046	10046	14707	14707	14707	40745	40745	40745

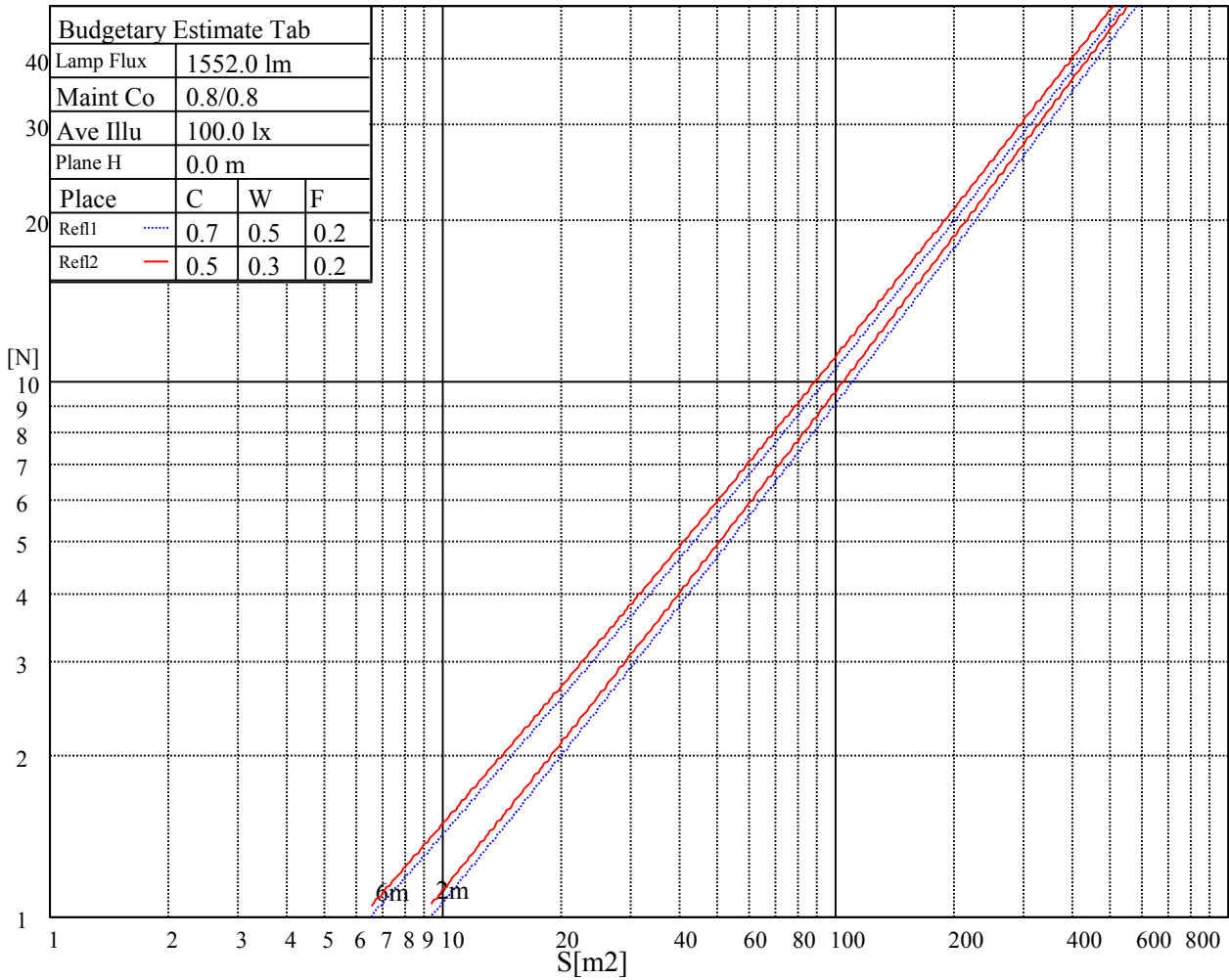
Glare Table

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

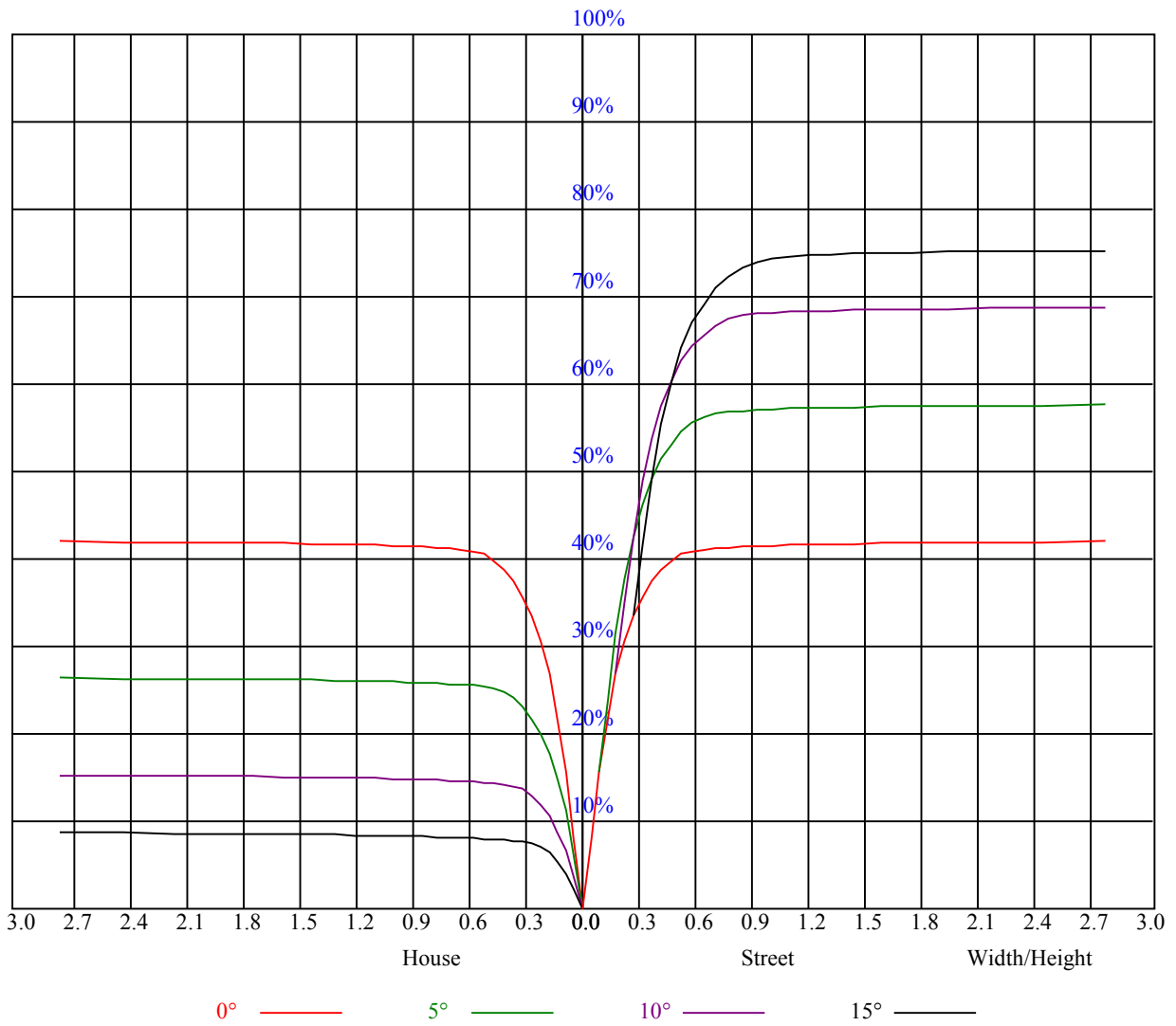
Luminance Limiting Curve



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	8.74	9.67	9.11	9.98	10.29	8.68	9.60	9.04	9.91	10.22
	3H	11.34	12.15	11.72	12.49	12.86	11.26	12.07	11.64	12.41	12.78
	4H	12.82	13.58	13.23	13.93	14.32	12.73	13.48	13.13	13.83	14.22
	6H	14.55	15.23	14.97	15.61	16.01	14.43	15.12	14.85	15.50	15.90
	8H	15.51	16.16	15.95	16.55	16.96	15.41	16.05	15.85	16.45	16.86
	12H	17.11	17.73	17.55	18.11	18.55	17.04	17.65	17.47	18.04	18.47
4H	2H	9.42	10.17	9.83	10.53	10.92	9.37	10.12	9.77	10.47	10.86
	3H	12.33	12.95	12.75	13.36	13.77	12.27	12.89	12.69	13.30	13.70
	4H	14.02	14.57	14.46	14.99	15.44	13.93	14.48	14.37	14.91	15.36
	6H	15.88	16.36	16.36	16.81	17.28	15.80	16.28	16.28	16.73	17.20
	8H	16.98	17.42	17.45	17.87	18.34	16.90	17.34	17.38	17.79	18.27
	12H	18.52	18.90	19.01	19.38	19.86	18.46	18.84	18.95	19.33	19.81
8H	4H	14.65	15.09	15.13	15.54	16.02	14.58	15.02	15.06	15.48	15.95
	6H	16.81	17.16	17.32	17.66	18.15	16.75	17.10	17.26	17.60	18.09
	8H	18.10	18.41	18.63	18.93	19.43	18.04	18.34	18.57	18.87	19.37
	12H	19.81	20.08	20.34	20.57	21.16	19.77	20.03	20.29	20.53	21.11
12H	4H	14.82	15.20	15.32	15.69	16.17	14.76	15.14	15.26	15.63	16.11
	6H	17.31	17.41	17.64	17.88	18.43	17.25	17.35	17.58	17.82	18.37
	8H	18.52	18.78	19.04	19.28	19.86	18.46	18.73	18.99	19.23	19.81
Variation with the observer position at spacings:											
S = 1.0H	1.4/-1.3					1.4/-1.3					
S = 1.5H	1.4/-1.2					1.4/-1.2					
S = 2.0H	1.6/-1.1					1.6/-1.1					
Standard tables:	BKBF					BKBF					
Uncorrected UGR	1.8					1.8					



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	1.01	1.01	1.01	0.98	0.98	0.98	0.94	0.94	0.94	0.90	0.90	0.90	0.86	0.86	0.86	0.85
1	0.95	0.93	0.92	0.93	0.92	0.90	0.90	0.89	0.88	0.87	0.86	0.85	0.84	0.83	0.83	0.81
2	0.91	0.88	0.86	0.89	0.87	0.85	0.87	0.85	0.83	0.84	0.83	0.81	0.82	0.81	0.80	0.78
3	0.87	0.84	0.81	0.86	0.83	0.81	0.84	0.81	0.79	0.82	0.80	0.78	0.80	0.78	0.77	0.76
4	0.83	0.80	0.77	0.83	0.79	0.77	0.81	0.78	0.76	0.79	0.77	0.75	0.78	0.76	0.74	0.73
5	0.81	0.77	0.74	0.80	0.77	0.74	0.78	0.76	0.73	0.77	0.75	0.73	0.76	0.74	0.72	0.71
6	0.78	0.74	0.72	0.77	0.74	0.72	0.76	0.73	0.71	0.75	0.73	0.71	0.74	0.72	0.70	0.69
7	0.76	0.72	0.70	0.75	0.72	0.69	0.74	0.71	0.69	0.73	0.71	0.69	0.72	0.70	0.68	0.68
8	0.73	0.70	0.67	0.73	0.70	0.67	0.72	0.69	0.67	0.71	0.69	0.67	0.71	0.68	0.67	0.66
9	0.71	0.68	0.66	0.71	0.68	0.66	0.70	0.67	0.65	0.70	0.67	0.65	0.69	0.67	0.65	0.64
10	0.70	0.66	0.64	0.69	0.66	0.64	0.69	0.66	0.64	0.68	0.65	0.64	0.68	0.65	0.63	0.63





NATA 1420-E

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	8046.00	7982.44	7801.88	7481.25	7071.75	6481.13	5785.31	5139.00	4507.88
45.0	8060.06	8011.13	7850.25	7615.69	7225.88	6715.69	6162.75	5450.63	4802.63
90.0	8045.44	7979.06	7832.81	7522.88	7169.63	6723.56	6175.69	5392.69	4753.13
135.0	8053.31	8061.75	7963.31	7758.00	7475.06	7023.38	6438.94	5827.50	5192.44
180.0	8046.00	8008.88	7873.31	7593.19	7164.00	6659.44	6059.81	5247.00	4617.56
225.0	8060.06	8011.69	7846.88	7430.06	7031.81	6463.13	5667.19	5022.00	4407.75
270.0	8045.44	8020.69	7860.94	7626.94	7105.50	6472.69	5911.31	5087.25	4469.63
315.0	8053.31	7930.69	7701.19	7292.81	6729.19	6116.06	5454.00	4644.56	4049.44
360.0	8046.00	7982.44	7801.88	7481.25	7071.75	6481.13	5785.31	5139.00	4507.88
C/γ(°)	9.0	10.0	11.0	12.0	13.0	14.0	15.0	16.0	17.0
0.0	3789.00	3288.94	2853.56	2439.00	2093.06	1832.63	1587.38	1408.50	1245.94
45.0	4120.31	3495.94	3024.56	2624.06	2207.25	1921.50	1681.88	1447.88	1295.44
90.0	4135.50	3461.06	3013.31	2631.94	2261.81	1944.00	1704.38	1475.44	1308.38
135.0	4422.94	3845.81	3340.13	2904.75	2451.94	2140.31	1862.44	1597.50	1420.31
180.0	4031.44	3388.50	2951.44	2570.63	2199.94	1887.19	1653.75	1434.94	1270.69
225.0	3786.75	3236.06	2802.94	2337.75	2058.19	1747.13	1491.19	1302.19	1112.74
270.0	3918.38	3295.69	2857.50	2458.69	2040.75	1755.00	1517.63	1276.88	1125.00
315.0	3519.56	2934.56	2537.44	2200.50	1878.19	1618.88	1429.88	1255.50	1112.91
360.0	3789.00	3288.94	2853.56	2439.00	2093.06	1832.63	1587.38	1408.50	1245.94
C/γ(°)	18.0	19.0	20.0	21.0	22.0	23.0	24.0	25.0	26.0
0.0	1118.25	1026.00	941.06	867.94	811.13	757.69	681.75	605.81	534.94
45.0	1170.00	1051.31	963.00	894.94	829.13	772.88	718.31	650.25	574.31
90.0	1120.11	1024.20	934.43	850.33	780.86	726.08	673.93	598.67	531.23
135.0	1264.50	1117.13	1009.13	920.81	850.50	789.75	732.38	668.25	599.06
180.0	1117.13	988.26	917.27	840.49	784.63	726.36	667.18	575.44	495.51
225.0	1011.99	908.49	840.09	778.61	725.12	669.60	603.73	512.21	435.15
270.0	1003.50	897.19	817.88	761.63	708.19	655.31	584.44	503.44	427.50
315.0	1013.34	926.55	863.33	801.06	739.29	675.45	600.19	498.32	418.84
360.0	1118.25	1026.00	941.06	867.94	811.13	757.69	681.75	605.81	534.94
C/γ(°)	27.0	28.0	29.0	30.0	31.0	32.0	33.0	34.0	35.0
0.0	429.75	341.44	286.88	194.34	131.46	86.23	55.80	41.79	35.66
45.0	488.25	399.38	323.44	287.44	169.31	115.65	74.25	45.90	37.07
90.0	456.58	375.13	295.48	229.95	166.67	111.38	73.41	46.91	37.46
135.0	510.75	419.63	341.44	288.00	184.67	128.31	84.49	51.30	38.42
180.0	416.64	322.54	252.68	187.43	131.68	76.73	51.47	38.76	33.24
225.0	360.17	279.28	207.79	151.09	96.81	60.13	42.08	35.10	29.87
270.0	351.56	284.06	204.69	147.94	92.87	62.04	44.04	35.78	30.43
315.0	341.83	253.52	190.41	133.48	79.65	53.44	40.05	33.58	29.31
360.0	429.75	341.44	286.88	194.34	131.46	86.23	55.80	41.79	35.66
C/γ(°)	36.0	37.0	38.0	39.0	40.0	41.0	42.0	43.0	44.0
0.0	29.98	27.62	25.76	24.36	23.34	22.44	21.38	20.48	19.63
45.0	32.06	26.27	22.05	20.53	19.01	17.83	16.59	15.53	14.68
90.0	31.78	25.54	21.09	19.29	17.83	16.76	15.86	14.79	14.12
135.0	33.81	28.07	23.57	22.16	20.81	19.69	18.56	17.55	16.71
180.0	28.01	25.31	23.06	21.83	20.70	19.63	18.73	17.83	16.99
225.0	25.31	23.06	21.43	19.74	18.51	17.49	16.59	15.58	14.79
270.0	26.72	24.24	21.94	20.25	18.79	17.61	16.54	15.41	14.63
315.0	27.11	25.48	24.53	23.29	22.11	21.26	20.31	19.01	18.23
360.0	29.98	27.62	25.76	24.36	23.34	22.44	21.38	20.48	19.63

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	18.56	17.55	16.65	15.69	14.34	13.39	12.32	11.48	10.58
45.0	13.89	13.16	12.60	12.04	11.42	11.03	10.63	10.18	9.84
90.0	13.39	12.77	12.15	11.64	11.14	10.63	10.29	9.96	9.62
135.0	15.86	15.02	14.40	13.73	12.94	12.38	11.81	11.14	10.52
180.0	16.20	15.47	14.51	13.84	13.11	12.21	11.53	10.86	10.18
225.0	14.12	13.33	12.66	12.04	11.42	10.86	10.46	10.01	9.62
270.0	13.84	13.11	12.54	12.04	11.42	11.03	10.69	10.29	10.01
315.0	17.33	16.31	15.36	14.46	13.56	12.66	11.87	11.03	10.41
360.0	18.56	17.55	16.65	15.69	14.34	13.39	12.32	11.48	10.58
C/γ(°)	54.0	55.0	56.0	57.0	58.0	59.0	60.0	61.0	62.0
0.0	9.84	9.28	8.83	8.38	8.16	7.93	7.76	7.59	7.43
45.0	9.51	9.23	8.89	8.61	8.38	8.04	7.88	7.65	7.59
90.0	9.28	9.00	8.78	8.55	8.33	8.16	7.93	7.71	7.59
135.0	10.01	9.45	9.00	8.72	8.33	8.10	7.88	7.71	7.48
180.0	9.62	9.17	8.83	8.55	8.21	7.93	7.76	7.59	7.43
225.0	9.28	9.00	8.72	8.49	8.27	8.04	7.93	7.76	7.65
270.0	9.79	9.45	9.23	8.94	8.66	8.44	8.21	7.93	7.88
315.0	9.73	9.23	8.78	8.38	8.10	7.88	7.71	7.54	7.37
360.0	9.84	9.28	8.83	8.38	8.16	7.93	7.76	7.59	7.43
C/γ(°)	63.0	64.0	65.0	66.0	67.0	68.0	69.0	70.0	71.0
0.0	7.26	7.09	6.92	6.86	6.75	6.69	6.58	6.58	6.47
45.0	7.43	7.31	7.20	7.03	6.92	6.81	6.69	6.75	6.64
90.0	7.48	7.26	7.14	7.09	6.98	6.86	6.75	6.69	6.64
135.0	7.37	7.26	7.14	7.03	6.86	6.81	6.75	6.69	6.64
180.0	7.31	7.20	7.09	7.03	6.98	6.92	6.81	6.75	6.69
225.0	7.54	7.43	7.31	7.20	7.14	7.09	6.98	6.92	6.81
270.0	7.65	7.48	7.37	7.20	7.09	7.03	6.86	6.81	6.75
315.0	7.20	7.09	6.92	6.86	6.75	6.69	6.64	6.58	6.53
360.0	7.26	7.09	6.92	6.86	6.75	6.69	6.58	6.58	6.47
C/γ(°)	72.0	73.0	74.0	75.0	76.0	77.0	78.0	79.0	80.0
0.0	6.41	6.36	6.30	6.24	6.19	6.13	6.13	6.08	6.08
45.0	6.58	6.53	6.47	6.41	6.36	6.30	6.24	6.19	6.19
90.0	6.53	6.53	6.41	6.41	6.36	6.30	6.30	6.24	6.19
135.0	6.58	6.53	6.47	6.36	6.30	6.24	6.19	6.13	6.08
180.0	6.64	6.58	6.47	6.41	6.36	6.30	6.19	6.19	6.13
225.0	6.75	6.69	6.64	6.64	6.47	6.47	6.36	6.36	6.30
270.0	6.64	6.58	6.58	6.53	6.47	6.41	6.41	6.36	6.30
315.0	6.47	6.41	6.30	6.19	6.13	6.13	6.02	6.08	5.96
360.0	6.41	6.36	6.30	6.24	6.19	6.13	6.13	6.08	6.08
C/γ(°)	81.0	82.0	83.0	84.0	85.0	86.0	87.0	88.0	89.0
0.0	6.02	5.96	5.96	5.96	5.96	5.96	5.85	5.79	5.79
45.0	6.08	6.08	6.08	6.02	5.96	5.85	5.85	5.79	5.79
90.0	6.19	6.13	6.08	6.02	5.91	5.79	5.68	5.68	5.63
135.0	6.02	6.02	5.91	5.91	5.91	5.85	5.85	5.74	5.74
180.0	6.08	6.08	5.96	5.96	6.02	5.96	5.79	5.79	5.74
225.0	6.24	6.24	6.19	6.19	6.13	6.08	5.74	5.79	5.74
270.0	6.24	6.24	6.19	6.13	6.08	5.96	5.79	5.68	5.68
315.0	5.91	5.85	5.79	5.79	5.79	5.79	5.74	5.74	5.68
360.0	6.02	5.96	5.96	5.96	5.96	5.96	5.85	5.79	5.79

Intensity data(cd)

<b>C/γ(°)</b>	<b>90.0</b>
<b>0.0</b>	<b>5.74</b>
<b>45.0</b>	<b>5.74</b>
<b>90.0</b>	<b>5.63</b>
<b>135.0</b>	<b>5.68</b>
<b>180.0</b>	<b>5.74</b>
<b>225.0</b>	<b>5.74</b>
<b>270.0</b>	<b>5.57</b>
<b>315.0</b>	<b>5.68</b>
<b>360.0</b>	<b>5.74</b>