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NATA

LumCAT: 2-1794-N	
Luminaire: 92.70.129.00	
Report No: NATA0100	Voltage(V): 35.5000
Test No: GC2019012503	Current(A): 0.6000
LampCAT: CREE CXB1830	Power (W): 21.3000
Lamp flux(lm): 2906.0	PF: 0.0000
Number of Lamps: 1	Ballast type: DC
Length(mm): 69	Width(mm): 69
Phm Type: C	Height(mm): 0

Photometric Results

Lumens(lm): 2384.64
Efficiency(%): 82.06%
Lumens(lm)/Power(W): 112.04
Central intensity(cd): 7781.766
Maximum intensity(cd): 7781.766
Angle of maximum intensity: C=0.0 γ =0.0
Beam Angle(50%Imax): [C0/180]Total=27.5
 [C90/270]Total=27.5
Field angle(10%Imax): [C0/180]Total=58.1
 [C90/270]Total=58.1
Maximum s/h(1/2): C0_180=0.46 C90_270=0.46
Maximum s/h(1/4): C0_180=0.48 C90_270=0.48
Up flux rate of lamp(%): 0.00%
Down flux rate of lamp(%): 82.12%
Up flux rate of LUM(%): - -
Down flux rate of LUM(%): 100.00%
CIE Type : Direct lighting
Output flux ratio in π solid angle : 97.872%

$\gamma(^{\circ})$	Average I(cd)	Zonal F(lm)	Sum F(lm)	Eff Flux(%)	Eff Sum(%)
0.0	7781.766	1.862	1.862	.064%	.078%
1.0	7750.969	14.834	16.696	.510%	.700%
2.0	7655.906	29.300	45.996	1.008%	1.929%
3.0	7500.586	43.047	89.043	1.481%	3.734%
4.0	7309.547	55.915	144.958	1.924%	6.079%
5.0	7081.172	67.679	212.637	2.329%	8.917%
6.0	6813.352	78.099	290.736	2.688%	12.192%
7.0	6490.477	86.741	377.477	2.985%	15.829%
8.0	6181.875	94.347	471.824	3.247%	19.786%
9.0	5809.148	99.654	571.478	3.429%	23.965%
10.0	5396.625	102.765	674.243	3.536%	28.274%
11.0	5019.609	105.032	779.275	3.614%	32.679%
12.0	4605.609	105.007	884.282	3.613%	37.082%
13.0	4178.109	103.067	987.348	3.547%	41.404%
14.0	3807.422	101.008	1088.357	3.476%	45.640%
15.0	3444.539	97.764	1186.121	3.364%	49.740%
16.0	3093.961	93.520	1279.641	3.218%	53.662%
17.0	2772.773	88.900	1368.541	3.059%	57.390%
18.0	2479.781	84.033	1452.574	2.892%	60.914%
19.0	2221.805	79.323	1531.897	2.730%	64.240%
20.0	1984.781	74.442	1606.338	2.562%	67.362%
21.0	1762.664	69.271	1675.609	2.384%	70.267%
22.0	1582.031	64.989	1740.598	2.236%	72.992%
23.0	1438.945	61.656	1802.254	2.122%	75.577%
24.0	1303.460	58.138	1860.393	2.001%	78.016%
25.0	1190.756	55.185	1915.578	1.899%	80.330%
26.0	1093.584	52.571	1968.149	1.809%	82.534%
27.0	1007.367	50.152	2018.301	1.726%	84.637%
28.0	892.399	45.943	2064.244	1.581%	86.564%
29.0	782.536	41.603	2105.847	1.432%	88.309%
30.0	670.852	36.783	2142.63	1.266%	89.851%
31.0	546.384	30.860	2173.49	1.062%	91.145%
32.0	435.769	25.323	2198.813	.871%	92.207%
33.0	348.040	20.787	2219.6	.715%	93.079%
34.0	252.816	15.503	2235.103	.533%	93.729%
35.0	171.155	10.765	2245.868	.370%	94.180%
36.0	126.541	8.156	2254.025	.281%	94.522%
37.0	93.298	6.157	2260.182	.212%	94.781%

$\gamma(^{\circ})$	Average I(cd)	Zonal F(lm)	Sum F(lm)	Eff Flux(%)	Eff Sum(%)
38.0	79.488	5.367	2265.548	.185%	95.006%
39.0	71.747	4.951	2270.5	.170%	95.213%
40.0	65.222	4.597	2275.097	.158%	95.406%
41.0	60.532	4.355	2279.452	.150%	95.589%
42.0	56.102	4.117	2283.569	.142%	95.761%
43.0	51.961	3.886	2287.455	.134%	95.924%
44.0	48.790	3.717	2291.171	.128%	96.080%
45.0	45.816	3.553	2294.724	.122%	96.229%
46.0	42.940	3.387	2298.111	.117%	96.371%
47.0	40.549	3.252	2301.363	.112%	96.508%
48.0	38.468	3.135	2304.498	.108%	96.639%
49.0	36.415	3.014	2307.512	.104%	96.765%
50.0	34.678	2.913	2310.425	.100%	96.888%
51.0	33.138	2.824	2313.249	.097%	97.006%
52.0	31.795	2.748	2315.997	.095%	97.121%
53.0	30.488	2.670	2318.667	.092%	97.233%
54.0	29.377	2.606	2321.273	.090%	97.343%
55.0	28.336	2.545	2323.819	.088%	97.449%
56.0	27.309	2.483	2326.301	.085%	97.553%
57.0	26.346	2.423	2328.724	.083%	97.655%
58.0	25.348	2.357	2331.082	.081%	97.754%
59.0	24.511	2.304	2333.386	.079%	97.850%
60.0	23.646	2.246	2335.631	.077%	97.945%
61.0	22.774	2.184	2337.816	.075%	98.036%
62.0	22.057	2.136	2339.951	.073%	98.126%
63.0	21.354	2.086	2342.038	.072%	98.213%
64.0	20.637	2.034	2344.072	.070%	98.299%
65.0	20.032	1.991	2346.063	.069%	98.382%
66.0	19.512	1.955	2348.017	.067%	98.464%
67.0	18.970	1.915	2349.932	.066%	98.544%
68.0	18.457	1.877	2351.809	.065%	98.623%
69.0	18.035	1.846	2353.655	.064%	98.700%
70.0	17.599	1.814	2355.469	.062%	98.777%
71.0	17.156	1.779	2357.248	.061%	98.851%
72.0	16.741	1.746	2358.994	.060%	98.924%
73.0	16.341	1.714	2360.707	.059%	98.996%
74.0	15.961	1.682	2362.39	.058%	99.067%
75.0	15.581	1.650	2364.04	.057%	99.136%

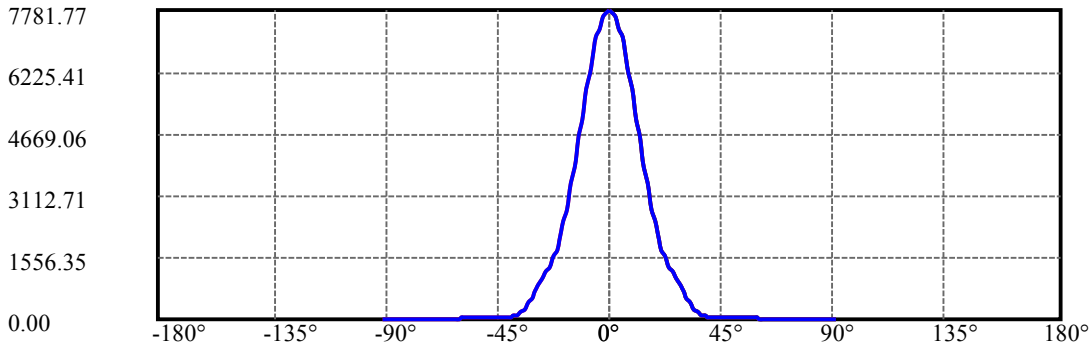
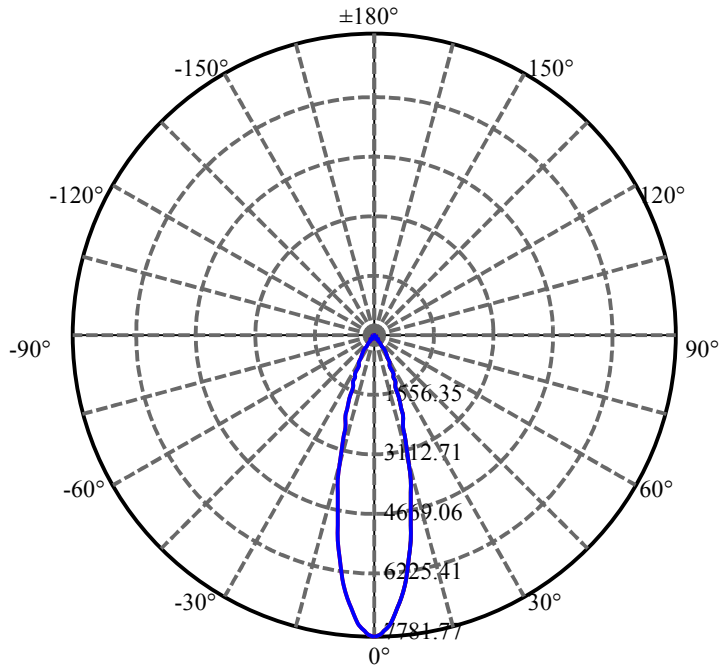
$\gamma(^{\circ})$	Average I(cd)	Zonal F(lm)	Sum F(lm)	Eff Flux(%)	Eff Sum(%)
76.0	15.188	1.616	2365.656	.056%	99.204%
77.0	14.829	1.584	2367.241	.055%	99.270%
78.0	14.491	1.554	2368.795	.053%	99.335%
79.0	14.098	1.518	2370.313	.052%	99.399%
80.0	13.781	1.488	2371.801	.051%	99.461%
81.0	13.514	1.464	2373.265	.050%	99.523%
82.0	13.507	1.467	2374.731	.050%	99.584%
83.0	13.106	1.427	2376.158	.049%	99.644%
84.0	12.635	1.378	2377.536	.047%	99.702%
85.0	12.459	1.361	2378.897	.047%	99.759%
86.0	12.263	1.341	2380.239	.046%	99.815%
87.0	12.030	1.317	2381.556	.045%	99.870%
88.0	11.777	1.291	2382.847	.044%	99.925%
89.0	11.025	1.209	2384.056	.042%	99.975%
90.0	10.744	0.589	2384.645	.020%	100.000%

ZONAL LUMEN SUMMARY

Zone	Lumens	%Lamp	%Fixt
0-30	2142.63	73.73%	89.85%
0-40	2275.10	78.29%	95.41%
0-60	2335.63	80.37%	97.94%
0-90	2384.06	82.04%	99.98%
0-120	2384.06	82.04%	99.98%
0-180	2384.64	82.06%	100.00%
60-90	50.67	1.74%	2.12%
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%
0-24.86	1907.72	65.65%	80.00%

ZONAL LUMEN SUMMARY

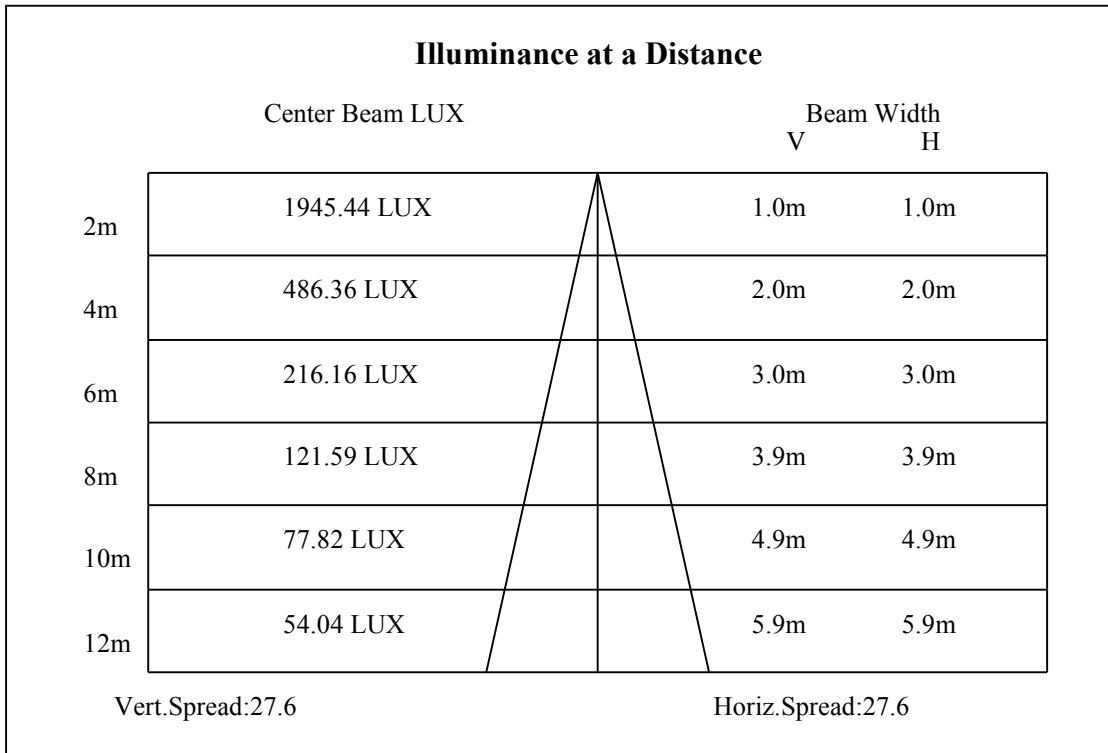
0-10	674.24
10-20	932.10
20-30	536.29
30-40	132.47
40-50	35.33
50-60	25.21
60-70	19.84
70-80	16.33
80-90	12.25
90-100	0.00
100-110	0.00
110-120	0.00
120-130	0.00
130-140	0.00
140-150	0.00
150-160	0.00
160-170	0.00
170-180	0.00

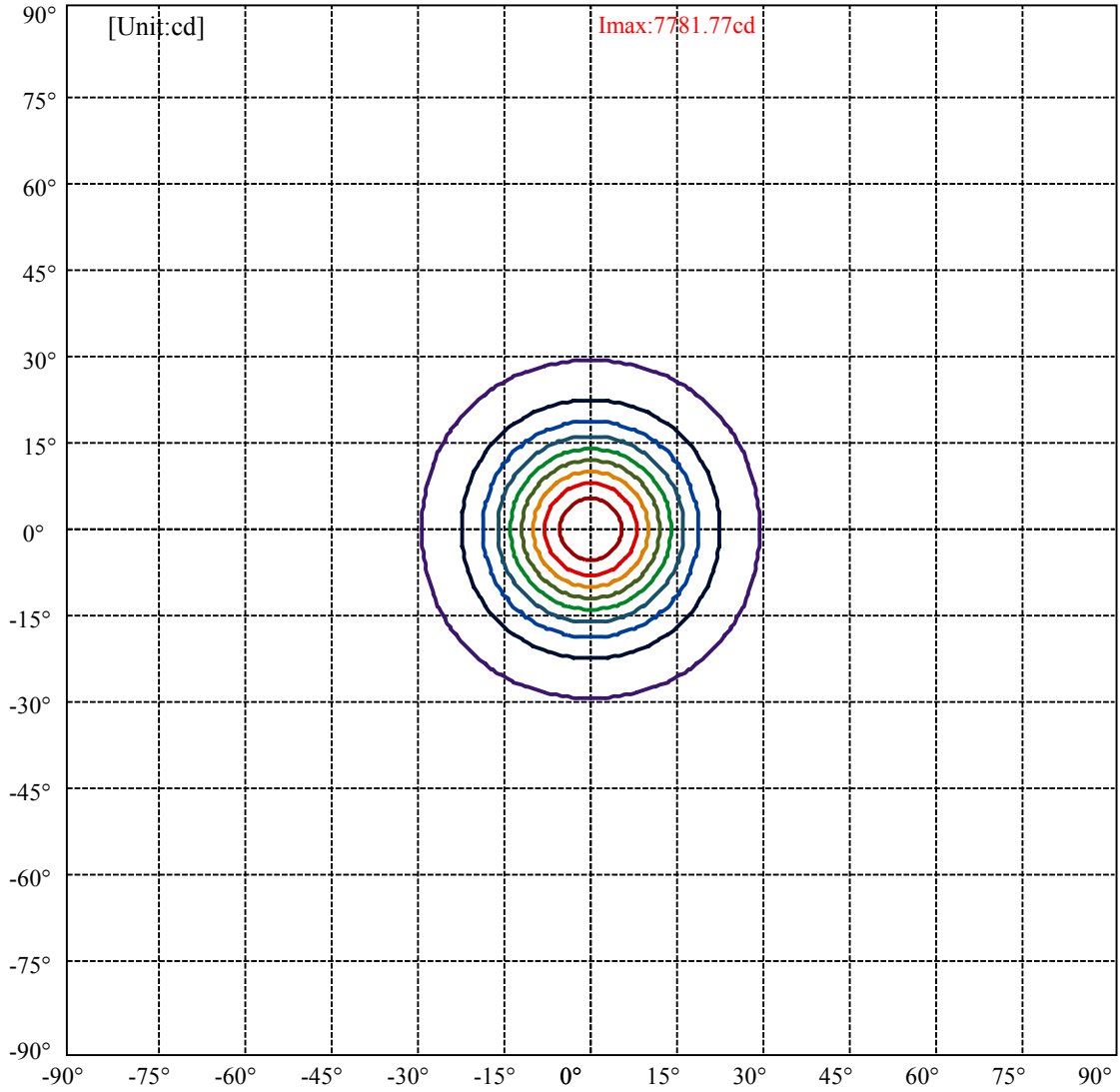


C0(Max): ———
C0/C180: ———
C90/C270: ———

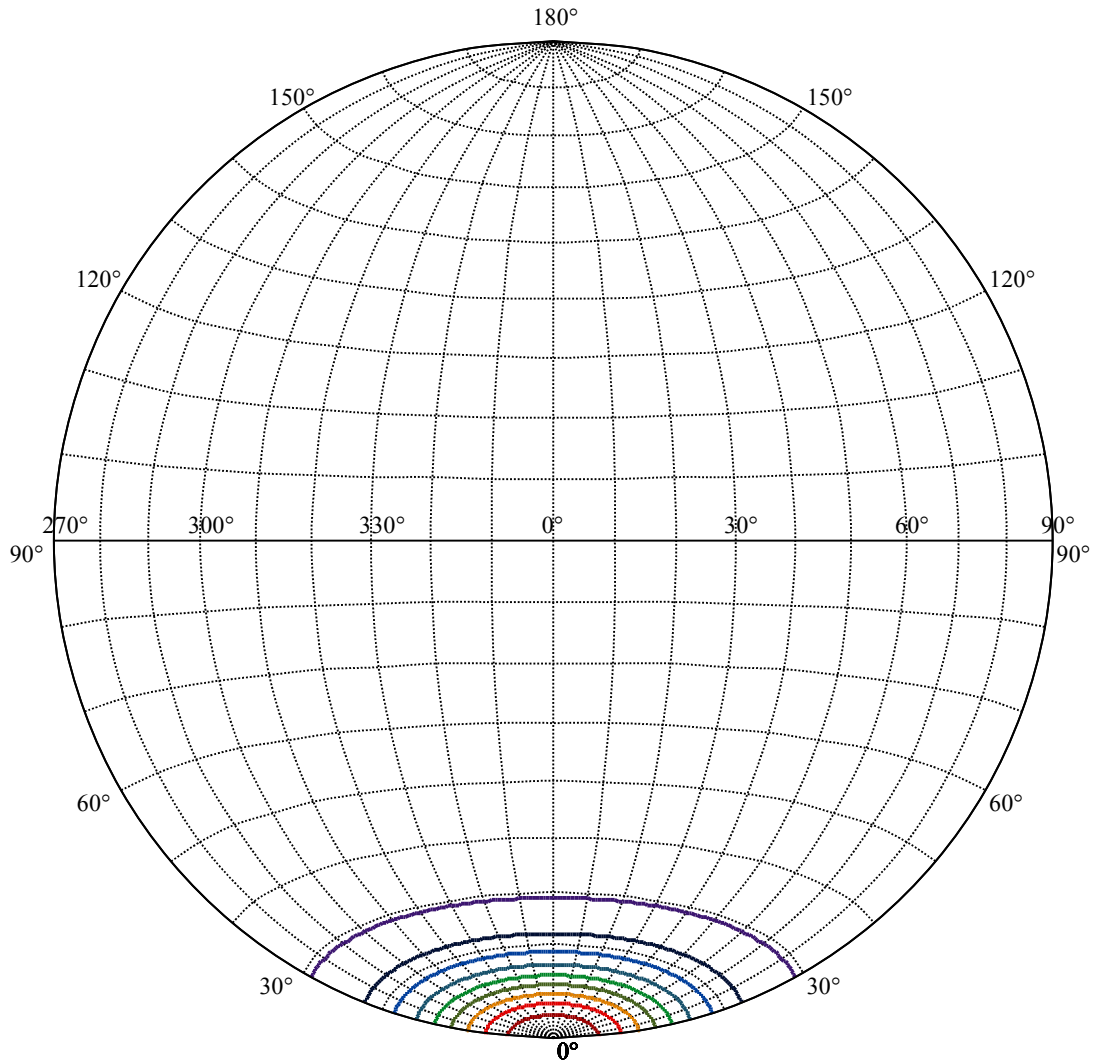
Field angle(10%Imax):C0/180Left:29.0 Right:29.0
:C90/270Left:29.0 Right:29.0

Beam Angle(50%Imax):C0/180Left:13.8 Right:13.8
:C90/270Left:13.8 Right:13.8





(10%Imax) 778.177	—
(20%Imax) 1556.35	—
(30%Imax) 2334.53	—
(40%Imax) 3112.71	—
(50%Imax) 3890.88	—
(60%Imax) 4669.06	—
(70%Imax) 5447.24	—
(80%Imax) 6225.41	—
(90%Imax) 7003.59	—



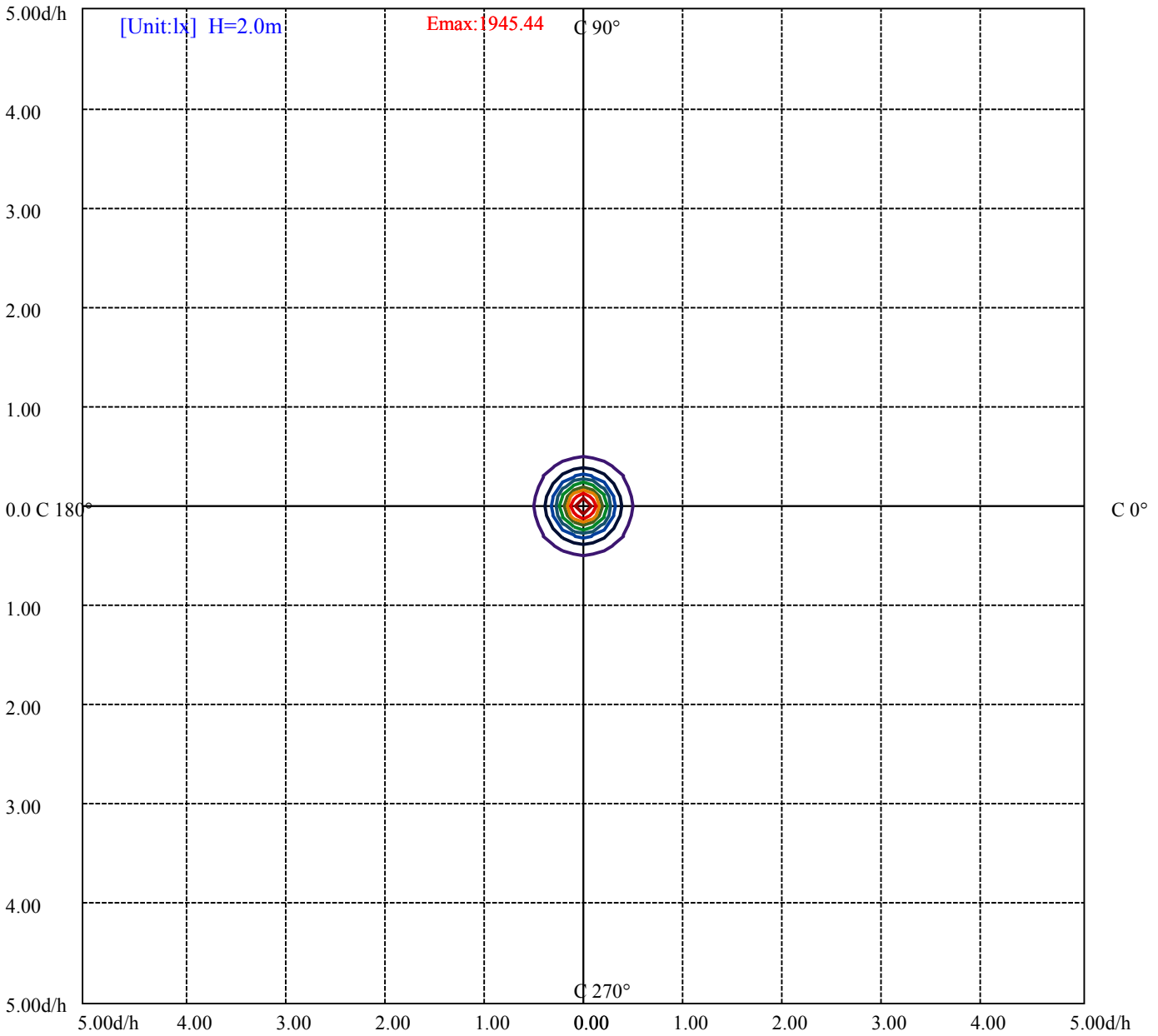
House

[Unit:cd]

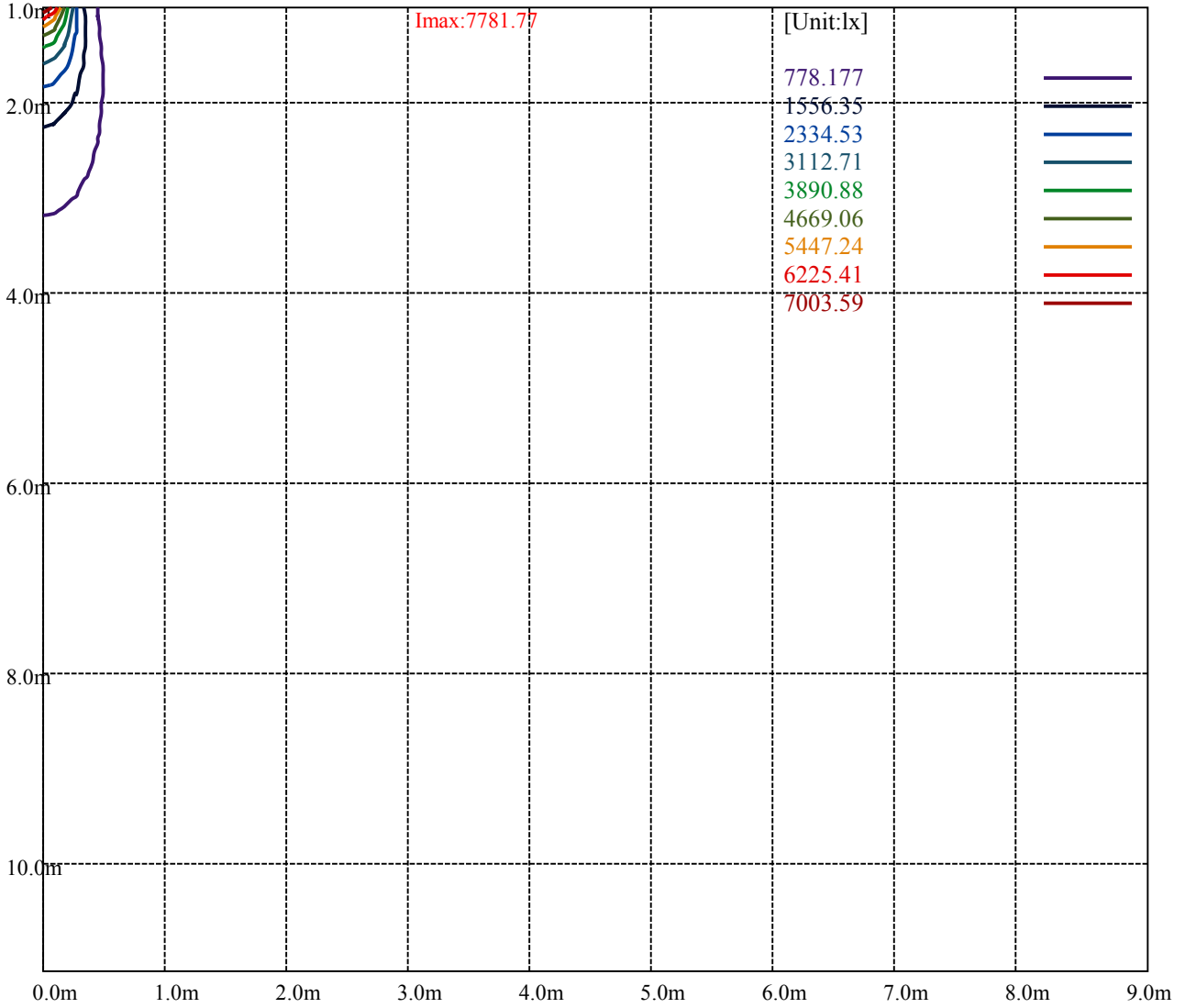
Road

Imax:7781.77

(10%Imax) 778.177	—
(20%Imax) 1556.35	—
(30%Imax) 2334.53	—
(40%Imax) 3112.71	—
(50%Imax) 3890.88	—
(60%Imax) 4669.06	—
(70%Imax) 5447.24	—
(80%Imax) 6225.41	—
(90%Imax) 7003.59	—



(10%Emax) 194.544	—
(20%Emax) 389.0875	—
(30%Emax) 583.6325	—
(40%Emax) 778.175	—
(50%Emax) 972.72	—
(60%Emax) 1167.265	—
(70%Emax) 1361.807	—
(80%Emax) 1556.353	—
(90%Emax) 1750.895	—



Luminance Table

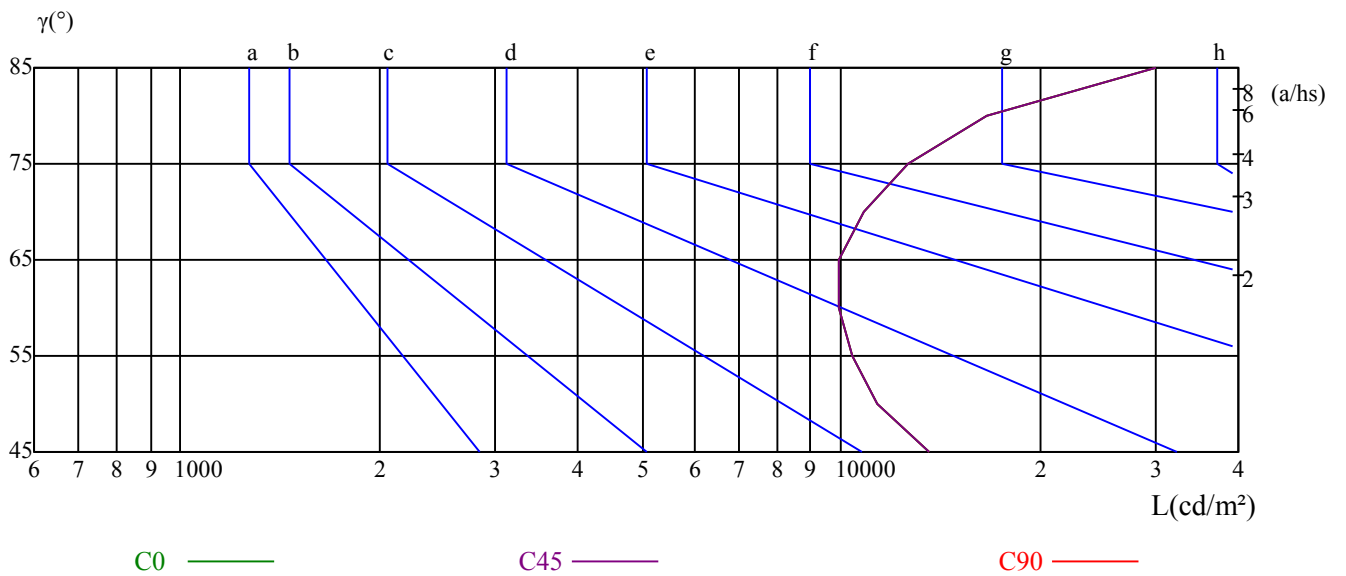
γ	45	50	55	60	65	70	75	80	85
C0	13609	11332	10376	9933	9956	10808	12645	16669	30026
C45	13609	11332	10376	9933	9956	10808	12645	16669	30026
C90	13609	11332	10376	9933	9956	10808	12645	16669	30026

L(Hor)(65)	L(Ver)(65)	L45(65)	L(Hor)(75)	L(Ver)(75)	L45(75)	L(Hor)(85)	L(Ver)(85)	L45(85)
9956	9956	9956	12645	12645	12645	30026	30026	30026

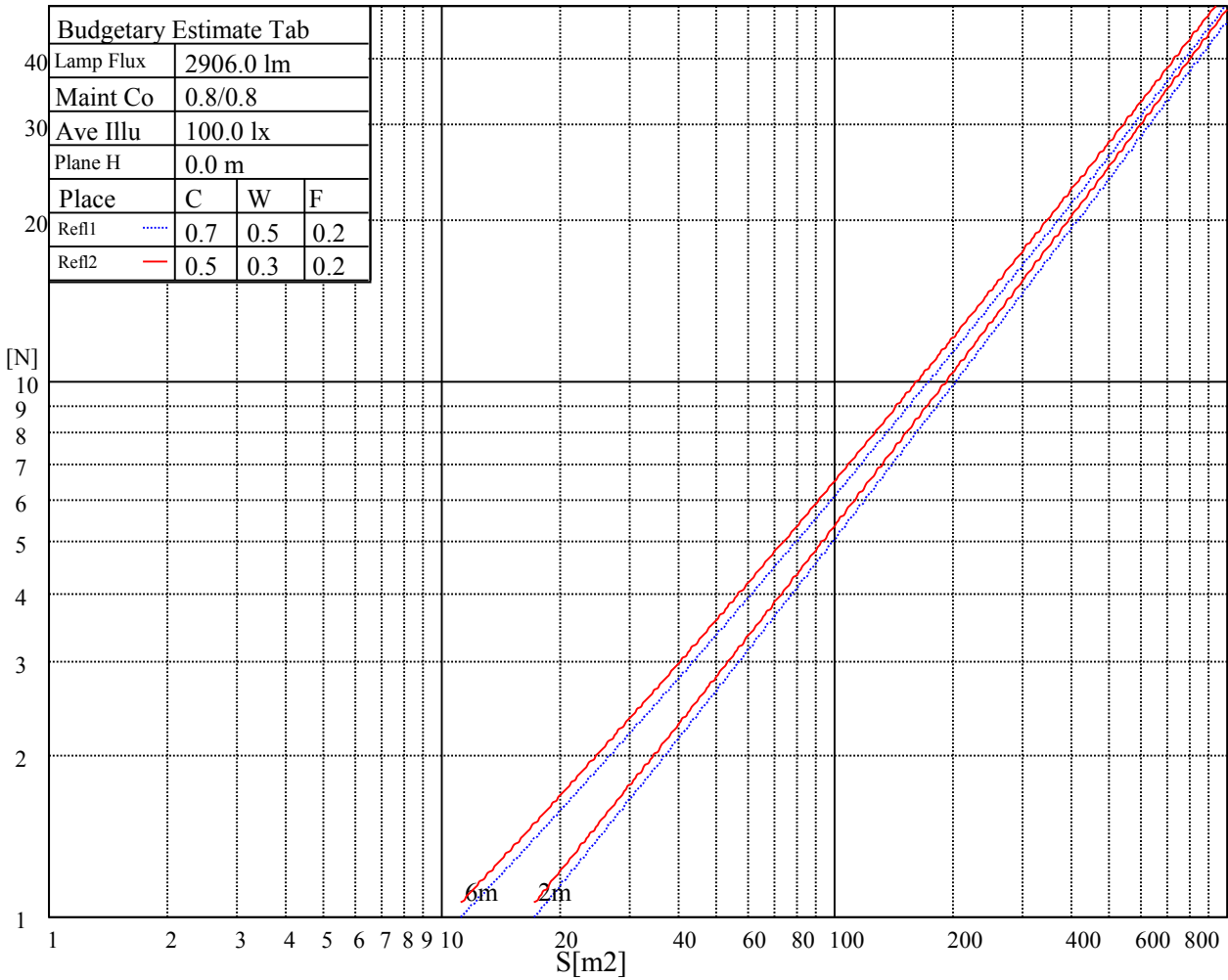
Glare Table

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

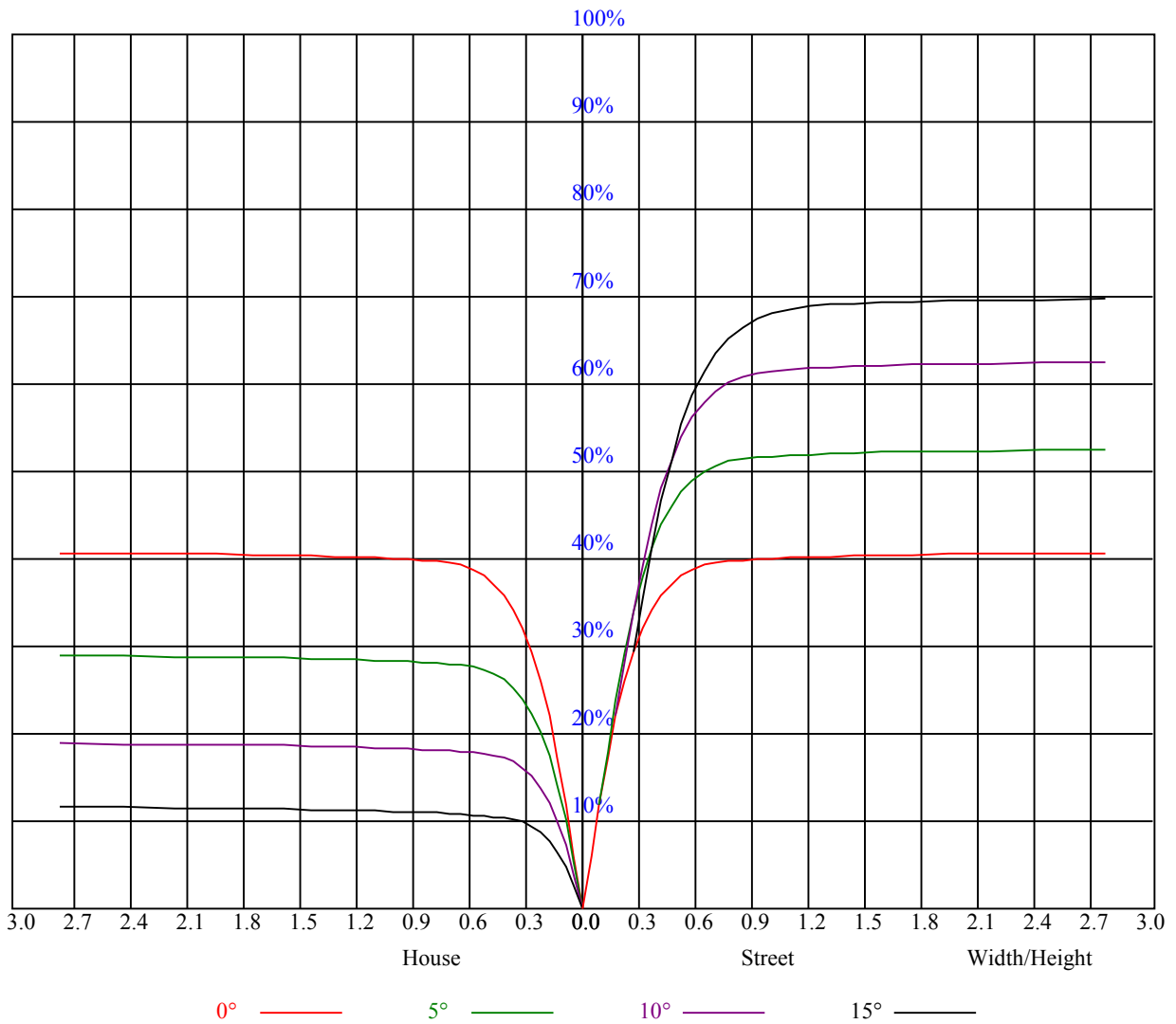
Luminance Limiting Curve



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	8.60	9.55	8.96	9.86	10.17	8.65	9.60	9.02	9.91	10.23
	3H	10.74	11.58	11.12	11.91	12.28	10.79	11.63	11.17	11.96	12.33
	4H	11.88	12.66	12.29	13.01	13.40	11.93	12.71	12.34	13.06	13.46
	6H	13.17	13.88	13.58	14.25	14.65	13.21	13.92	13.63	14.30	14.70
	8H	13.89	14.56	14.33	14.95	15.36	13.94	14.60	14.37	14.99	15.41
	12H	15.14	15.78	15.58	16.17	16.60	15.18	15.82	15.62	16.21	16.64
4H	2H	9.17	9.94	9.57	10.30	10.69	9.21	9.99	9.62	10.34	10.73
	3H	11.61	12.25	12.03	12.66	13.06	11.65	12.29	12.06	12.70	13.10
	4H	12.95	13.52	13.39	13.94	14.39	12.99	13.56	13.43	13.98	14.43
	6H	14.34	14.83	14.81	15.28	15.75	14.37	14.86	14.84	15.31	15.78
	8H	15.20	15.65	15.67	16.10	16.58	15.23	15.69	15.71	16.14	16.61
	12H	16.45	16.84	16.94	17.33	17.81	16.48	16.88	16.98	17.36	17.84
8H	4H	13.46	13.91	13.94	14.36	14.84	13.49	13.95	13.97	14.40	14.87
	6H	15.15	15.51	15.66	16.01	16.50	15.17	15.53	15.68	16.04	16.52
	8H	16.20	16.52	16.74	17.05	17.54	16.23	16.55	16.76	17.07	17.57
	12H	17.70	17.98	18.23	18.48	19.06	17.73	18.01	18.26	18.51	19.09
12H	4H	13.58	13.97	14.07	14.46	14.94	13.61	14.00	14.10	14.49	14.97
	6H	15.62	15.70	15.92	16.18	16.73	15.64	15.72	15.94	16.20	16.75
	8H	16.56	16.84	17.09	17.34	17.92	16.59	16.86	17.11	17.36	17.94
Variation with the observer position at spacings:											
S = 1.0H	3.5/-1.8					3.5/-1.8					
S = 1.5H	4.4/-1.5					4.4/-1.5					
S = 2.0H	5.0/-1.3					5.0/-1.3					
Standard tables:	BKBF					BKBF					
Uncorrected UGR	3.9					3.9					



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	0.98	0.98	0.98	0.95	0.95	0.95	0.91	0.91	0.91	0.87	0.87	0.87	0.84	0.84	0.84	0.82
1	0.92	0.90	0.88	0.90	0.88	0.87	0.87	0.85	0.84	0.84	0.83	0.82	0.81	0.80	0.79	0.78
2	0.87	0.84	0.81	0.85	0.83	0.81	0.83	0.81	0.79	0.80	0.79	0.77	0.78	0.77	0.76	0.74
3	0.82	0.79	0.76	0.81	0.78	0.76	0.79	0.77	0.74	0.77	0.75	0.73	0.75	0.74	0.72	0.71
4	0.78	0.75	0.72	0.78	0.74	0.72	0.76	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	0.67	0.72	0.69	0.67	0.71	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	0.65	0.63	0.69	0.65	0.62	0.68	0.64	0.62	0.67	0.64	0.62	0.66	0.63	0.61	0.61
8	0.67	0.63	0.60	0.66	0.63	0.60	0.65	0.62	0.60	0.65	0.62	0.60	0.64	0.61	0.59	0.58
9	0.64	0.61	0.58	0.64	0.60	0.58	0.63	0.60	0.58	0.63	0.60	0.58	0.62	0.59	0.57	0.56
10	0.62	0.58	0.56	0.62	0.58	0.56	0.61	0.58	0.56	0.61	0.58	0.56	0.60	0.57	0.55	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	7783.31	7699.50	7553.81	7356.38	7144.31	6903.00	6554.25	6250.50	5918.06
45.0	7798.50	7773.19	7670.25	7533.56	7332.19	7098.75	6862.50	6553.69	6255.56
90.0	7797.94	7804.13	7738.88	7605.00	7422.75	7238.25	7012.13	6688.69	6386.06
135.0	7747.31	7822.69	7824.94	7761.38	7639.31	7453.13	7245.00	7011.56	6758.44
180.0	7783.31	7804.69	7762.50	7657.31	7509.94	7326.56	7085.81	6766.88	6518.81
225.0	7798.50	7755.75	7655.63	7457.63	7290.00	7057.69	6778.13	6458.63	6127.88
270.0	7797.94	7737.19	7588.69	7401.94	7184.81	6897.38	6603.75	6256.69	5918.06
315.0	7747.31	7610.63	7452.56	7231.50	6953.06	6674.63	6365.25	5937.19	5572.13
360.0	7783.31	7699.50	7553.81	7356.38	7144.31	6903.00	6554.25	6250.50	5918.06
C/γ(°)	9.0	10.0	11.0	12.0	13.0	14.0	15.0	16.0	17.0
0.0	5514.75	5097.38	4717.13	4295.81	3893.06	3544.88	3179.81	2872.13	2551.50
45.0	5887.69	5478.75	5095.13	4712.63	4236.19	3867.19	3521.81	3113.44	2814.19
90.0	6066.56	5623.31	5244.19	4861.13	4434.75	4020.75	3664.13	3287.81	2937.94
135.0	6393.38	6073.31	5721.75	5286.94	4843.13	4450.50	4029.19	3633.75	3296.25
180.0	6209.44	5779.13	5410.13	5024.25	4493.25	4164.75	3803.63	3465.00	3057.19
225.0	5747.63	5331.38	4953.38	4508.44	4137.75	3747.94	3374.44	3059.44	2766.38
270.0	5464.69	5084.44	4696.88	4212.00	3836.25	3481.88	3108.38	2766.38	2492.44
315.0	5189.06	4705.31	4318.31	3943.69	3550.50	3181.50	2874.94	2553.75	2266.31
360.0	5514.75	5097.38	4717.13	4295.81	3893.06	3544.88	3179.81	2872.13	2551.50
C/γ(°)	18.0	19.0	20.0	21.0	22.0	23.0	24.0	25.0	26.0
0.0	2270.81	2042.44	1836.00	1613.25	1462.50	1346.63	1224.56	1141.31	1059.75
45.0	2515.50	2242.13	1983.94	1784.81	1575.56	1420.88	1290.94	1181.81	1100.81
90.0	2652.75	2354.63	2120.63	1883.25	1676.81	1521.00	1389.94	1261.69	1119.60
135.0	2922.75	2650.50	2353.50	2089.69	1870.88	1680.75	1482.19	1356.75	1253.25
180.0	2755.13	2480.06	2201.06	1951.31	1734.19	1563.19	1404.56	1281.94	1118.76
225.0	2464.88	2193.19	1972.13	1729.69	1560.94	1415.25	1298.25	1118.25	1098.06
270.0	2216.81	1996.31	1774.13	1580.06	1437.75	1323.56	1215.56	1121.63	1028.25
315.0	2039.63	1815.19	1636.88	1469.25	1337.63	1240.31	1121.68	1062.68	970.20
360.0	2270.81	2042.44	1836.00	1613.25	1462.50	1346.63	1224.56	1141.31	1059.75
C/γ(°)	27.0	28.0	29.0	30.0	31.0	32.0	33.0	34.0	35.0
0.0	942.75	816.75	703.69	581.63	463.50	362.81	293.63	180.00	117.06
45.0	1001.25	880.88	768.38	654.19	522.56	420.19	330.75	289.13	150.86
90.0	1101.49	995.68	892.58	781.54	644.18	535.84	431.78	310.39	232.59
135.0	1146.94	1070.44	972.56	850.50	723.38	613.69	496.13	393.75	289.69
180.0	1108.58	1007.33	883.41	769.67	657.28	521.89	421.26	325.07	217.58
225.0	1005.30	872.49	764.94	655.88	531.51	416.36	321.98	224.49	152.55
270.0	890.44	772.31	659.81	563.63	422.44	329.06	285.19	161.38	110.53
315.0	862.20	723.32	614.93	509.79	406.24	286.31	203.63	138.32	98.38
360.0	942.75	816.75	703.69	581.63	463.50	362.81	293.63	180.00	117.06
C/γ(°)	36.0	37.0	38.0	39.0	40.0	41.0	42.0	43.0	44.0
0.0	89.27	80.38	72.56	65.64	61.03	57.04	52.65	49.28	46.41
45.0	105.08	86.57	76.89	70.26	64.35	59.79	55.01	51.02	47.81
90.0	153.11	102.26	89.61	78.81	69.30	64.80	60.19	54.79	51.81
135.0	237.38	131.63	94.44	84.88	74.59	68.29	62.44	58.05	54.39
180.0	148.22	103.28	84.32	75.49	68.79	63.34	59.01	54.79	51.02
225.0	104.23	85.61	76.44	68.51	62.94	58.50	54.68	50.23	47.14
270.0	90.23	79.93	72.00	66.43	61.14	57.09	52.93	49.16	46.41
315.0	84.83	76.73	69.64	63.96	59.63	55.41	51.92	48.38	45.34
360.0	89.27	80.38	72.56	65.64	61.03	57.04	52.65	49.28	46.41

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	43.65	40.89	38.87	36.90	35.10	33.41	31.89	30.77	29.64
45.0	44.66	42.02	39.77	37.74	35.55	34.03	32.57	31.28	29.93
90.0	48.54	45.45	42.81	40.39	38.19	36.51	34.48	32.91	31.56
135.0	51.02	47.19	44.66	42.24	39.43	37.74	36.00	34.26	32.68
180.0	47.87	44.94	42.24	40.05	38.19	36.00	34.43	33.02	31.39
225.0	44.44	41.68	39.15	37.24	35.27	33.58	32.18	30.83	29.70
270.0	43.59	40.89	38.87	37.01	34.88	33.36	32.01	30.71	29.70
315.0	42.75	40.44	38.03	36.17	34.71	32.79	31.56	30.60	29.31
360.0	43.65	40.89	38.87	36.90	35.10	33.41	31.89	30.77	29.64
C/γ(°)	54.0	55.0	56.0	57.0	58.0	59.0	60.0	61.0	62.0
0.0	28.58	27.62	26.72	25.65	24.69	23.96	23.23	22.22	21.66
45.0	28.97	28.01	26.78	25.93	25.03	24.19	23.34	22.61	21.83
90.0	30.15	28.97	28.29	27.23	26.10	25.31	24.30	23.40	22.67
135.0	31.50	30.32	29.14	28.18	27.11	26.21	25.20	24.24	23.51
180.0	30.43	29.36	28.24	27.23	26.27	25.37	24.53	23.68	22.84
225.0	28.74	27.79	26.83	26.04	24.98	24.13	23.34	22.39	21.77
270.0	28.46	27.39	26.33	25.43	24.41	23.63	22.73	21.88	21.26
315.0	28.18	27.23	26.16	25.09	24.19	23.29	22.50	21.77	20.93
360.0	28.58	27.62	26.72	25.65	24.69	23.96	23.23	22.22	21.66
C/γ(°)	63.0	64.0	65.0	66.0	67.0	68.0	69.0	70.0	71.0
0.0	20.98	20.19	19.74	19.29	18.73	18.28	17.83	17.38	17.04
45.0	21.26	20.59	19.97	19.46	18.90	18.45	18.06	17.72	17.21
90.0	21.83	21.09	20.36	19.80	19.35	18.73	18.28	17.89	17.38
135.0	22.67	21.71	21.15	20.48	19.80	19.29	18.79	18.28	17.83
180.0	22.05	21.38	20.59	20.03	19.52	18.90	18.45	18.00	17.49
225.0	21.15	20.42	19.86	19.41	18.79	18.34	17.94	17.44	17.10
270.0	20.59	19.86	19.41	18.90	18.39	17.94	17.61	17.16	16.71
315.0	20.31	19.86	19.18	18.73	18.28	17.72	17.33	16.93	16.48
360.0	20.98	20.19	19.74	19.29	18.73	18.28	17.83	17.38	17.04
C/γ(°)	72.0	73.0	74.0	75.0	76.0	77.0	78.0	79.0	80.0
0.0	16.59	16.20	15.86	15.47	15.08	14.74	14.46	14.01	13.78
45.0	16.88	16.48	16.14	15.75	15.41	15.08	14.74	14.34	14.01
90.0	16.99	16.54	16.14	15.81	15.36	14.96	14.68	14.29	13.89
135.0	17.38	16.99	16.59	16.14	15.69	15.36	14.91	14.51	14.12
180.0	17.04	16.65	16.20	15.81	15.41	14.96	14.63	14.23	13.84
225.0	16.65	16.26	15.86	15.53	15.13	14.85	14.51	14.12	13.84
270.0	16.37	15.92	15.58	15.24	14.85	14.51	14.18	13.78	13.56
315.0	16.03	15.69	15.30	14.91	14.57	14.18	13.84	13.50	13.22
360.0	16.59	16.20	15.86	15.47	15.08	14.74	14.46	14.01	13.78
C/γ(°)	81.0	82.0	83.0	84.0	85.0	86.0	87.0	88.0	89.0
0.0	13.44	13.50	13.28	12.71	12.66	12.49	12.21	11.81	10.69
45.0	13.73	13.39	13.05	12.83	12.60	12.43	12.09	11.81	11.36
90.0	13.56	13.28	12.88	12.60	12.32	11.98	11.76	11.53	11.19
135.0	13.73	13.33	13.05	12.66	12.32	12.04	11.70	11.53	11.31
180.0	13.50	13.22	12.83	12.49	12.26	11.93	11.70	11.48	11.14
225.0	13.61	13.28	13.28	12.83	12.66	12.54	12.38	12.26	11.08
270.0	13.39	14.40	14.06	12.54	12.54	12.49	12.38	12.21	10.86
315.0	13.16	13.67	12.43	12.43	12.32	12.21	12.04	11.59	10.58
360.0	13.44	13.50	13.28	12.71	12.66	12.49	12.21	11.81	10.69

Intensity data(cd)

C/ γ (°)	90.0
0.0	10.46
45.0	10.97
90.0	10.86
135.0	10.86
180.0	10.69
225.0	10.80
270.0	10.74
315.0	10.58
360.0	10.46