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NATA

LumCAT: 3-1859-E	
Luminaire: 99.02.73.181	
Report No: NATA0100	Voltage(V): 35.1000
Test No: GC2019022012	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

Photometric Results

Lumens(lm): 2603.05
Efficiency(%): 86.83%
Lumens(lm)/Power(W): 74.23
Central intensity(cd): 9956.953
Maximum intensity(cd): 9956.953
Angle of maximum intensity: C=0.0 γ =0.0
Beam Angle(50%Imax): [C0/180]Total=25.4
 [C90/270]Total=25.4
Field angle(10%Imax): [C0/180]Total=52.1
 [C90/270]Total=52.1
Maximum s/h(1/2): C0_180=0.43 C90_270=0.43
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(%): 86.90%
Up flux rate of LUM(%): - -
Down flux rate of LUM(%): 100.00%
CIE Type : Direct lighting
Output flux ratio in π solid angle : 98.578%

$\gamma(^{\circ})$	Average I(cd)	Zonal F(lm)	Sum F(lm)	Eff Flux(%)	Eff Sum(%)
0.0	9956.953	2.382	2.382	.079%	.092%
1.0	9931.711	19.008	21.39	.634%	.822%
2.0	9845.086	37.678	59.068	1.257%	2.269%
3.0	9660.445	55.443	114.511	1.849%	4.399%
4.0	9409.219	71.976	186.488	2.401%	7.164%
5.0	9077.484	86.759	273.247	2.894%	10.497%
6.0	8666.016	99.336	372.582	3.313%	14.313%
7.0	8176.570	109.274	481.856	3.645%	18.511%
8.0	7689.375	117.354	599.21	3.914%	23.020%
9.0	7098.680	121.776	720.987	4.062%	27.698%
10.0	6485.273	123.495	844.482	4.119%	32.442%
11.0	5914.969	123.766	968.248	4.128%	37.197%
12.0	5356.195	122.120	1090.368	4.073%	41.888%
13.0	4802.344	118.466	1208.834	3.951%	46.439%
14.0	4366.617	115.844	1324.678	3.864%	50.889%
15.0	4004.297	113.651	1438.329	3.791%	55.255%
16.0	3676.781	111.137	1549.466	3.707%	59.525%
17.0	3415.078	109.493	1658.959	3.652%	63.731%
18.0	3152.391	106.825	1765.784	3.563%	67.835%
19.0	2918.109	104.183	1869.967	3.475%	71.837%
20.0	2677.289	100.415	1970.382	3.349%	75.695%
21.0	2421.703	95.170	2065.552	3.174%	79.351%
22.0	2176.523	89.411	2154.963	2.982%	82.786%
23.0	1879.102	80.516	2235.479	2.686%	85.879%
24.0	1586.841	70.778	2306.257	2.361%	88.598%
25.0	1223.684	56.711	2362.968	1.892%	90.777%
26.0	1006.348	48.377	2411.345	1.614%	92.635%
27.0	744.855	37.083	2448.428	1.237%	94.060%
28.0	528.567	27.212	2475.64	.908%	95.105%
29.0	358.847	19.078	2494.718	.636%	95.838%
30.0	233.986	12.830	2507.548	.428%	96.331%
31.0	166.718	9.416	2516.964	.314%	96.693%
32.0	106.699	6.200	2523.164	.207%	96.931%
33.0	82.027	4.899	2528.063	.163%	97.119%
34.0	61.763	3.787	2531.851	.126%	97.265%
35.0	47.925	3.014	2534.865	.101%	97.381%
36.0	37.463	2.415	2537.28	.081%	97.473%
37.0	30.684	2.025	2539.305	.068%	97.551%

$\gamma(^{\circ})$	Average I(cd)	Zonal F(lm)	Sum F(lm)	Eff Flux(%)	Eff Sum(%)
38.0	25.488	1.721	2541.026	.057%	97.617%
39.0	22.591	1.559	2542.585	.052%	97.677%
40.0	20.890	1.472	2544.057	.049%	97.734%
41.0	19.723	1.419	2545.476	.047%	97.788%
42.0	18.738	1.375	2546.851	.046%	97.841%
43.0	17.845	1.335	2548.186	.045%	97.892%
44.0	17.023	1.297	2549.482	.043%	97.942%
45.0	16.305	1.264	2550.747	.042%	97.991%
46.0	15.715	1.240	2551.986	.041%	98.038%
47.0	15.166	1.216	2553.203	.041%	98.085%
48.0	14.738	1.201	2554.404	.040%	98.131%
49.0	14.302	1.184	2555.587	.039%	98.177%
50.0	13.936	1.171	2556.758	.039%	98.222%
51.0	13.634	1.162	2557.92	.039%	98.266%
52.0	13.380	1.156	2559.076	.039%	98.311%
53.0	13.134	1.150	2560.227	.038%	98.355%
54.0	12.916	1.146	2561.372	.038%	98.399%
55.0	12.783	1.148	2562.521	.038%	98.443%
56.0	12.621	1.147	2563.668	.038%	98.487%
57.0	12.495	1.149	2564.817	.038%	98.531%
58.0	12.375	1.151	2565.968	.038%	98.575%
59.0	12.284	1.155	2567.123	.039%	98.620%
60.0	12.185	1.157	2568.28	.039%	98.664%
61.0	12.150	1.165	2569.445	.039%	98.709%
62.0	12.101	1.172	2570.617	.039%	98.754%
63.0	12.066	1.179	2571.796	.039%	98.799%
64.0	12.052	1.188	2572.984	.040%	98.845%
65.0	12.016	1.194	2574.178	.040%	98.891%
66.0	11.981	1.200	2575.378	.040%	98.937%
67.0	11.939	1.205	2576.583	.040%	98.983%
68.0	11.904	1.210	2577.794	.040%	99.030%
69.0	11.869	1.215	2579.009	.041%	99.076%
70.0	11.834	1.219	2580.228	.041%	99.123%
71.0	11.777	1.221	2581.449	.041%	99.170%
72.0	11.721	1.222	2582.672	.041%	99.217%
73.0	11.630	1.220	2583.891	.041%	99.264%
74.0	11.531	1.216	2585.107	.041%	99.311%
75.0	11.447	1.213	2586.319	.040%	99.357%

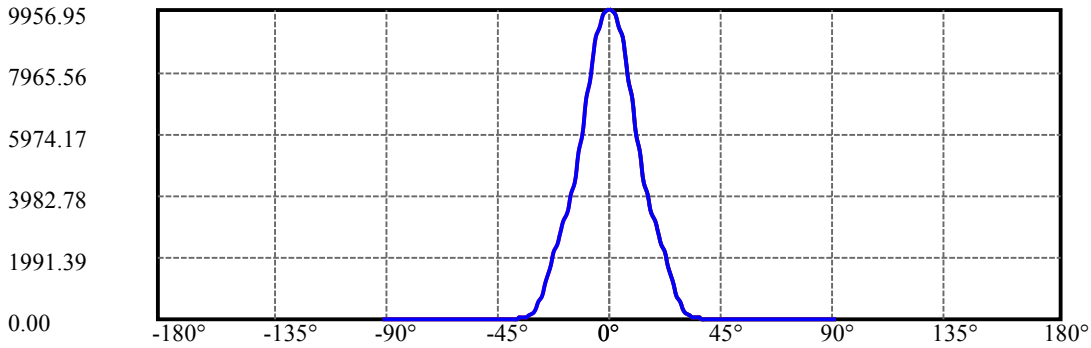
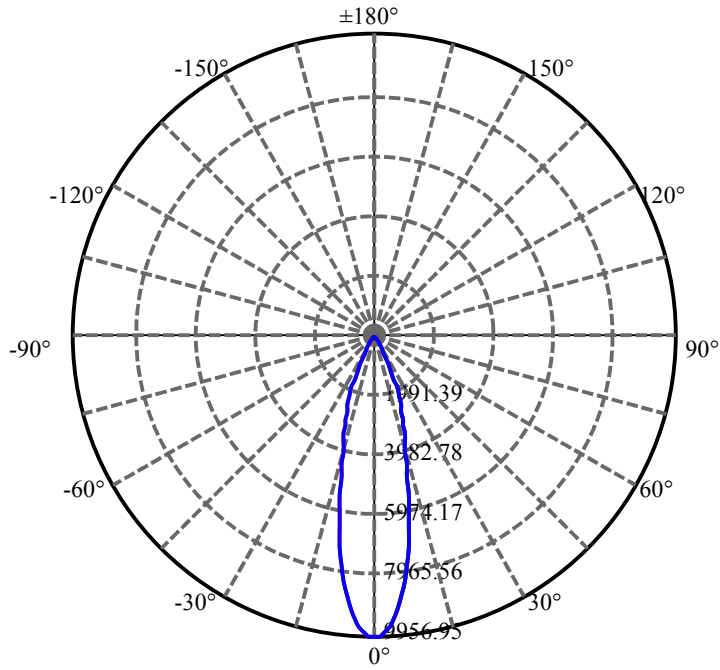
$\gamma(^{\circ})$	Average I(cd)	Zonal F(lm)	Sum F(lm)	Eff Flux(%)	Eff Sum(%)
76.0	11.313	1.204	2587.523	.040%	99.403%
77.0	11.215	1.198	2588.722	.040%	99.449%
78.0	11.102	1.191	2589.912	.040%	99.495%
79.0	10.997	1.184	2591.096	.039%	99.541%
80.0	10.884	1.175	2592.272	.039%	99.586%
81.0	10.779	1.167	2593.439	.039%	99.631%
82.0	10.673	1.159	2594.598	.039%	99.675%
83.0	10.589	1.153	2595.751	.038%	99.720%
84.0	10.519	1.147	2596.898	.038%	99.764%
85.0	10.448	1.141	2598.039	.038%	99.807%
86.0	10.378	1.135	2599.175	.038%	99.851%
87.0	10.259	1.123	2600.298	.037%	99.894%
88.0	10.125	1.110	2601.408	.037%	99.937%
89.0	10.005	1.097	2602.505	.037%	99.979%
90.0	9.970	0.547	2603.051	.018%	100.000%

ZONAL LUMEN SUMMARY

Zone	Lumens	%Lamp	%Fixt
0-30	2507.55	83.64%	96.33%
0-40	2544.06	84.86%	97.73%
0-60	2568.28	85.67%	98.66%
0-90	2602.50	86.81%	99.98%
0-120	2602.50	86.81%	99.98%
0-180	2603.05	86.83%	100.00%
60-90	35.38	1.18%	1.36%
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%
0-21.19	2082.44	69.46%	80.00%

ZONAL LUMEN SUMMARY

0-10	844.48
10-20	1125.90
20-30	537.17
30-40	36.51
40-50	12.70
50-60	11.52
60-70	11.95
70-80	12.04
80-90	10.23
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



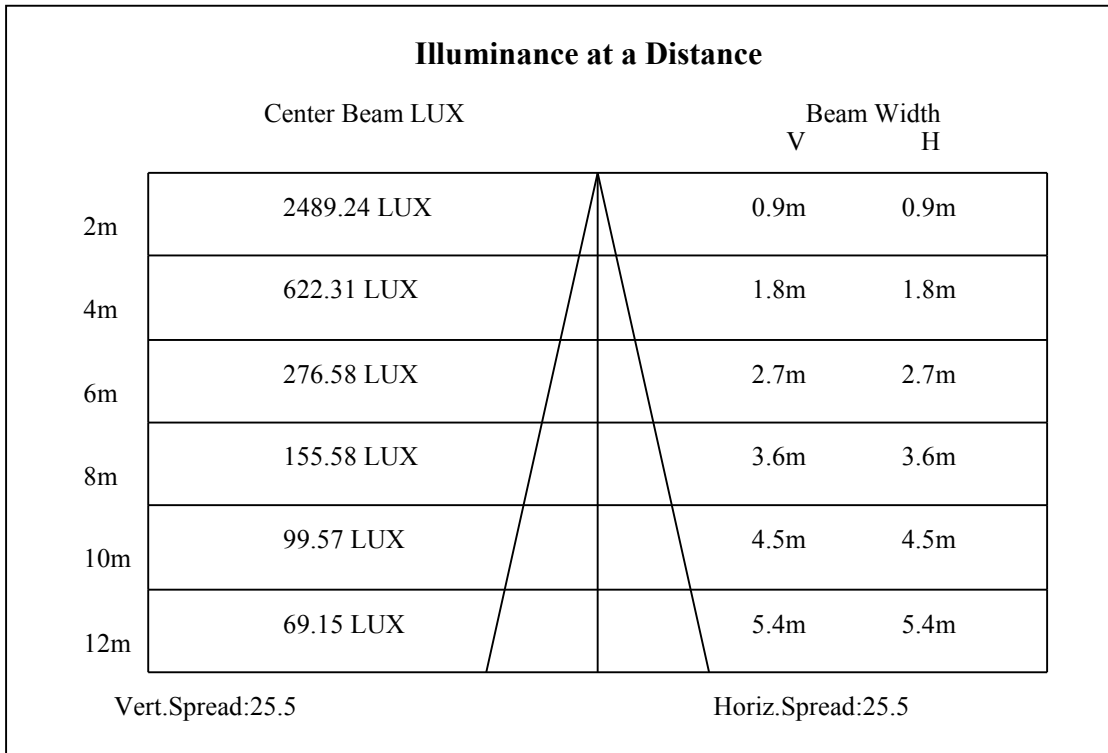
C0(Max): —————

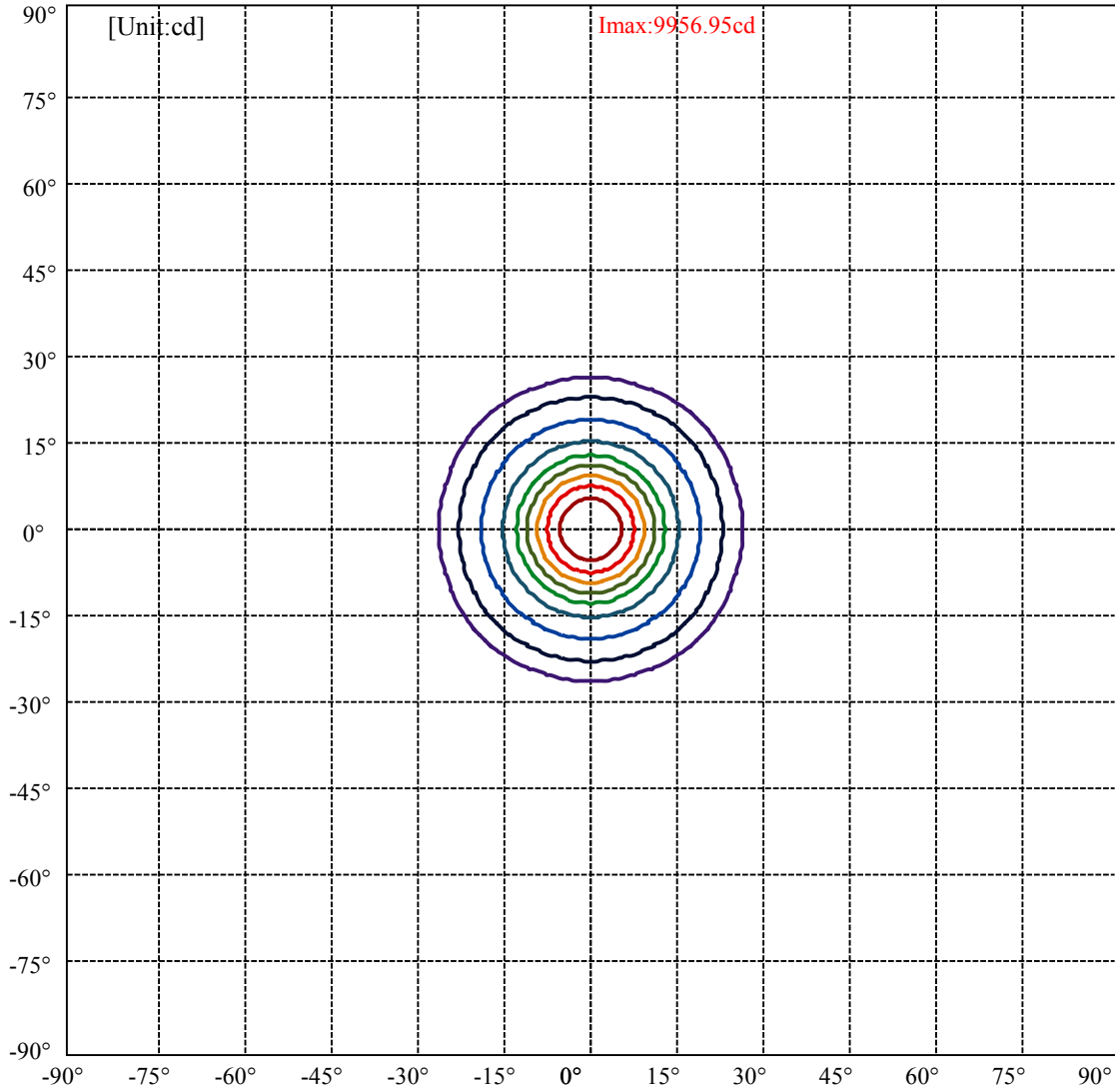
C0/C180: —————

C90/C270: —————

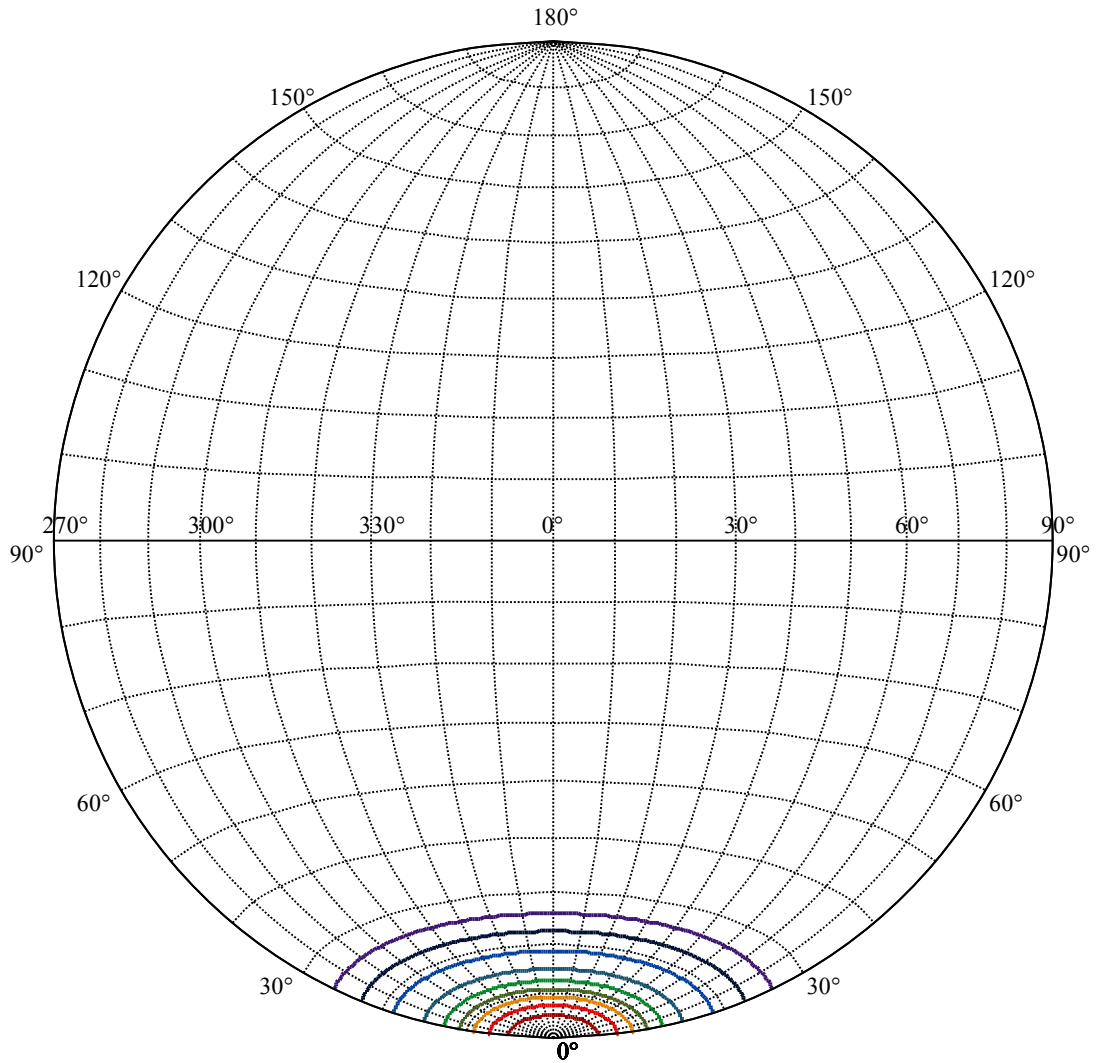
Field angle(10%Imax):C0/180Left:26.0 Right:26.0
:C90/270Left:26.0 Right:26.0

Beam Angle(50%Imax):C0/180Left:12.7 Right:12.7
:C90/270Left:12.7 Right:12.7





(10%Imax) 995.695	—
(20%Imax) 1991.39	—
(30%Imax) 2987.09	—
(40%Imax) 3982.78	—
(50%Imax) 4978.48	—
(60%Imax) 5974.17	—
(70%Imax) 6969.87	—
(80%Imax) 7965.56	—
(90%Imax) 8961.26	—



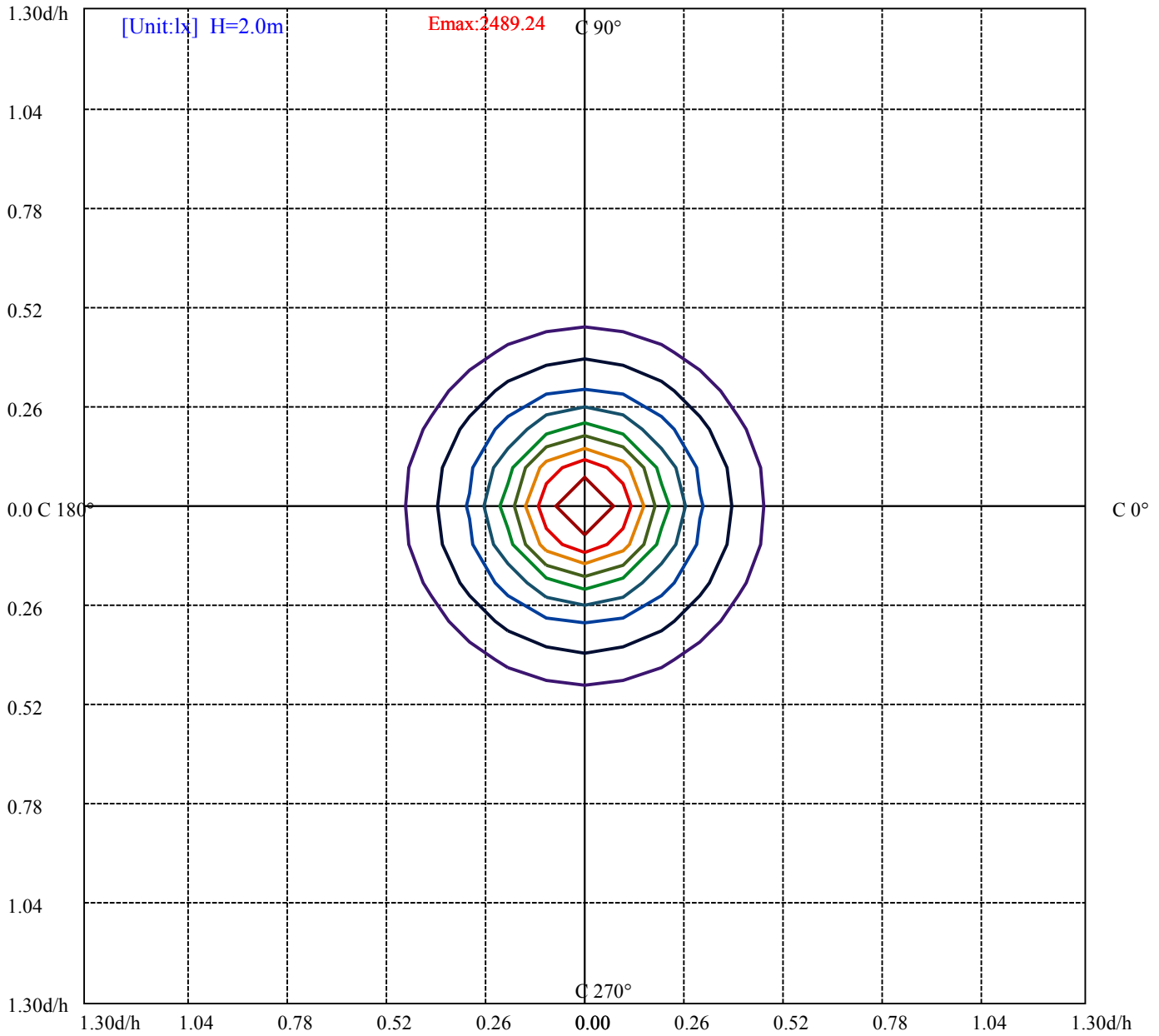
House

[Unit:cd]

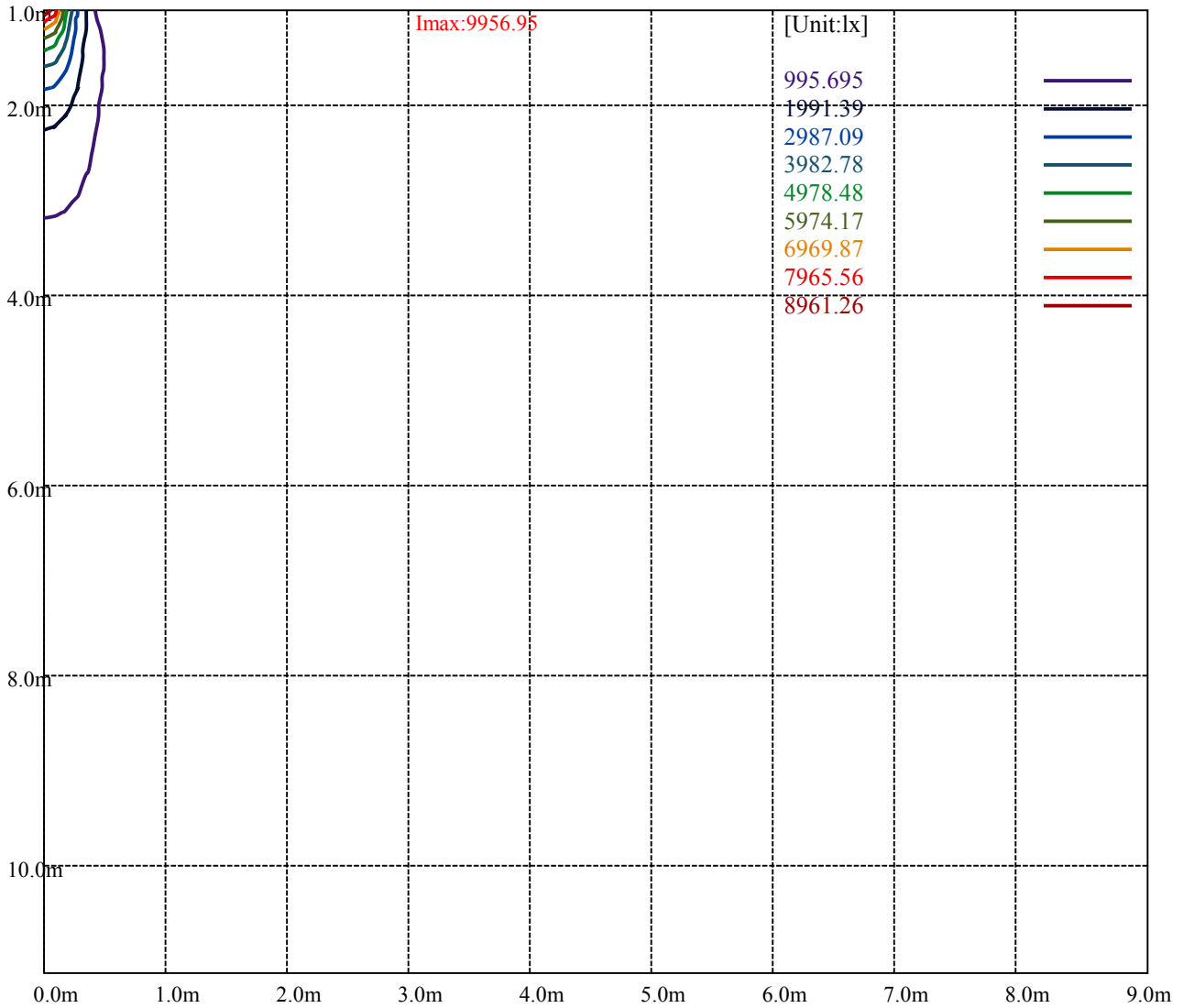
Road

Imax:9956.95

(10%Imax) 995.695	—
(20%Imax) 1991.39	—
(30%Imax) 2987.09	—
(40%Imax) 3982.78	—
(50%Imax) 4978.48	—
(60%Imax) 5974.17	—
(70%Imax) 6969.87	—
(80%Imax) 7965.56	—
(90%Imax) 8961.26	—



- (10%Emax) 248.9238
- (20%Emax) 497.8475
- (30%Emax) 746.77
- (40%Emax) 995.695
- (50%Emax) 1244.618
- (60%Emax) 1493.542
- (70%Emax) 1742.465
- (80%Emax) 1991.39
- (90%Emax) 2240.313



Luminance Table

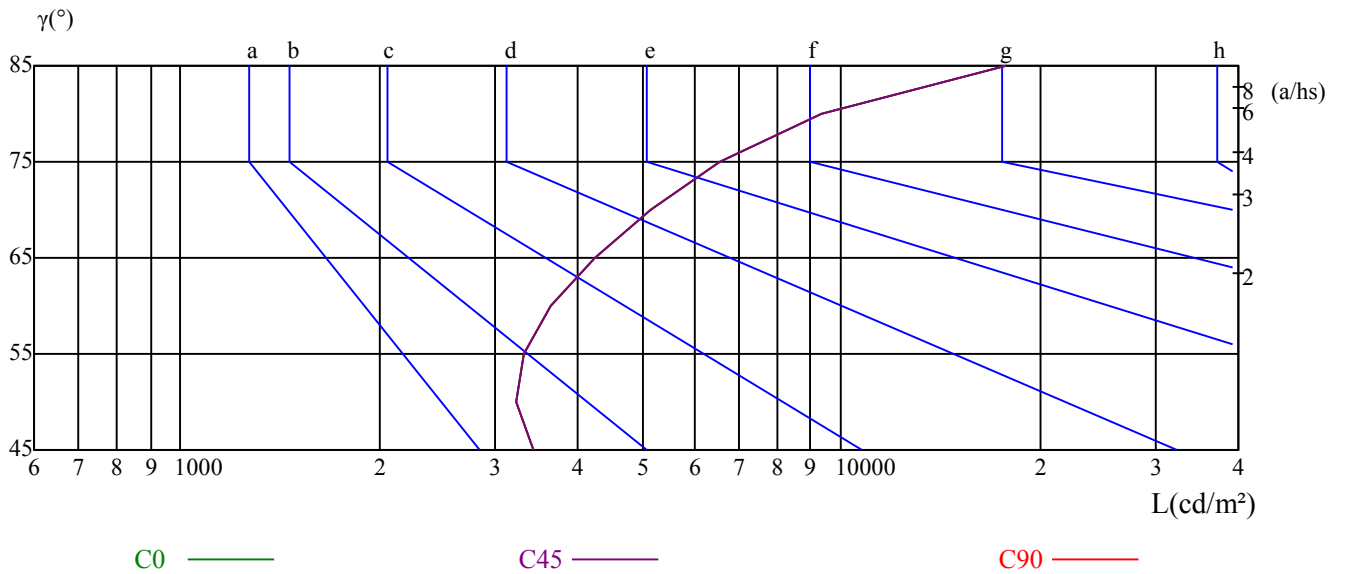
γ	45	50	55	60	65	70	75	80	85
C0	3429	3224	3314	3624	4229	5146	6578	9322	17829
C45	3429	3224	3314	3624	4229	5146	6578	9322	17829
C90	3429	3224	3314	3624	4229	5146	6578	9322	17829

L(Hor)(65)	L(Ver)(65)	L45(65)	L(Hor)(75)	L(Ver)(75)	L45(75)	L(Hor)(85)	L(Ver)(85)	L45(85)
4229	4229	4229	6578	6578	6578	17829	17829	17829

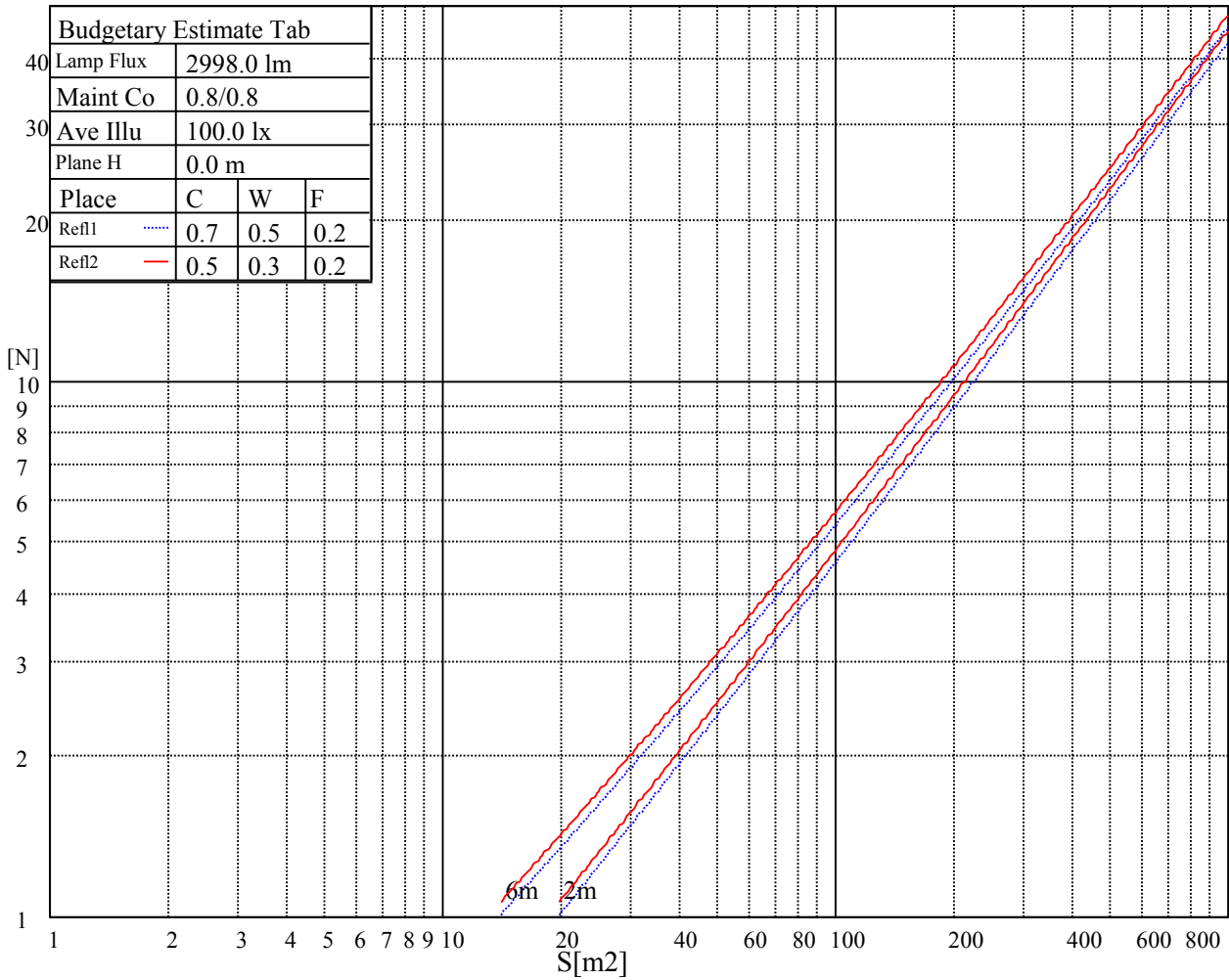
Glare Table

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

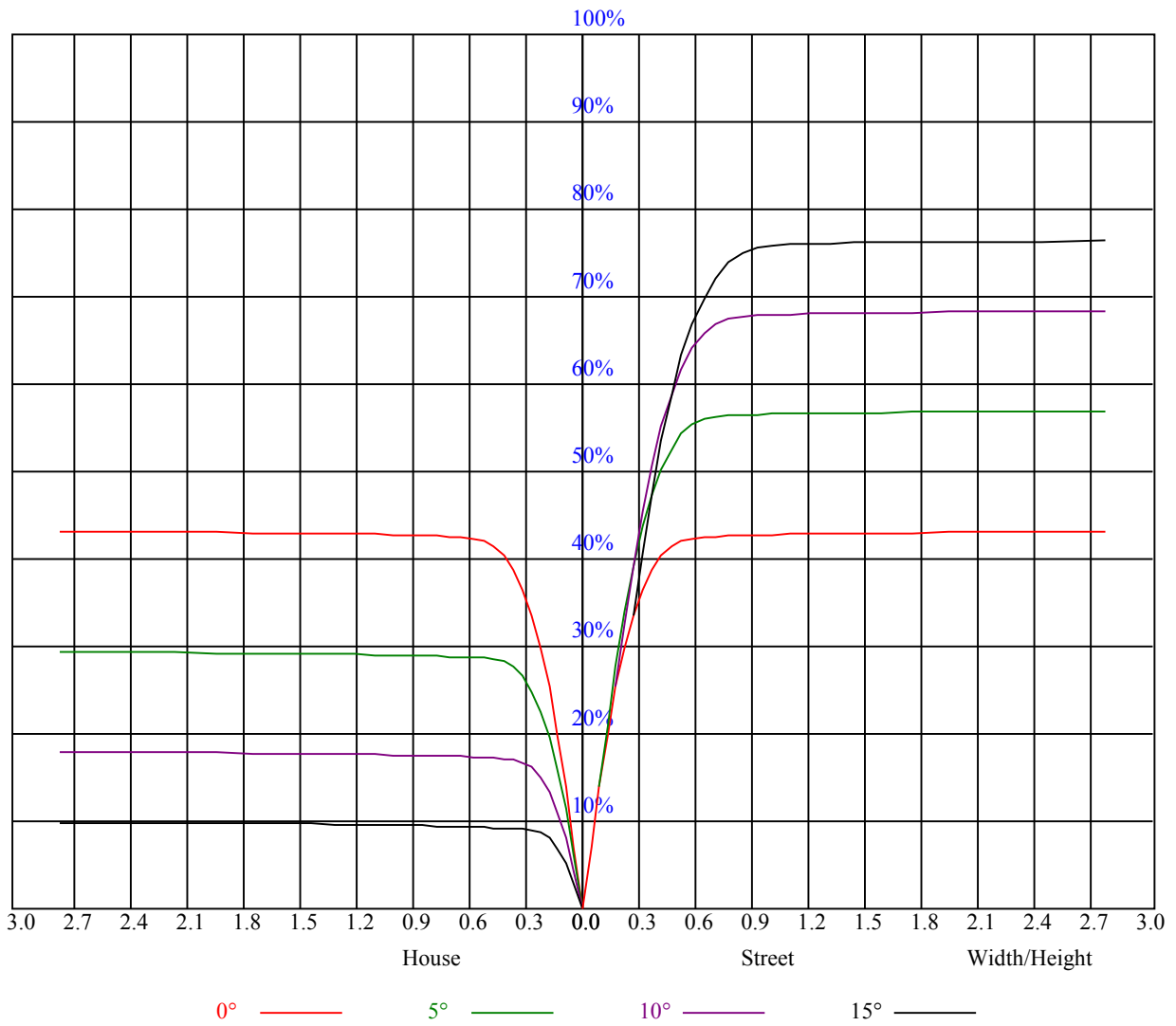
Luminance Limiting Curve



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	1.79	2.70	2.15	3.01	3.33	1.82	2.73	2.18	3.04	3.36
	3H	5.05	5.85	5.43	6.19	6.56	5.16	5.96	5.54	6.29	6.66
	4H	6.78	7.52	7.19	7.88	8.27	6.92	7.66	7.33	8.02	8.41
	6H	8.63	9.32	9.05	9.69	10.09	8.78	9.46	9.20	9.84	10.24
	8H	9.64	10.27	10.07	10.67	11.08	9.80	10.44	10.24	10.83	11.24
	12H	11.26	11.87	11.70	12.26	12.69	11.46	12.07	11.90	12.46	12.89
4H	2H	2.72	3.47	3.13	3.82	4.21	2.75	3.49	3.15	3.84	4.24
	3H	6.22	6.83	6.63	7.24	7.65	6.29	6.91	6.71	7.32	7.72
	4H	8.10	8.65	8.54	9.07	9.52	8.21	8.76	8.65	9.18	9.63
	6H	10.06	10.52	10.53	10.98	11.45	10.18	10.65	10.65	11.10	11.58
	8H	11.17	11.60	11.64	12.05	12.53	11.31	11.74	11.78	12.19	12.67
	12H	12.71	13.08	13.20	13.57	14.05	12.89	13.26	13.38	13.75	14.23
8H	4H	8.81	9.24	9.29	9.69	10.17	8.89	9.33	9.37	9.78	10.26
	6H	11.04	11.38	11.55	11.88	12.37	11.14	11.48	11.65	11.99	12.48
	8H	12.33	12.63	12.86	13.15	13.65	12.45	12.75	12.98	13.28	13.77
	12H	14.03	14.28	14.55	14.78	15.37	14.18	14.44	14.71	14.94	15.52
12H	4H	9.00	9.37	9.49	9.86	10.34	9.07	9.45	9.57	9.94	10.42
	6H	11.54	11.64	11.88	12.12	12.67	11.63	11.74	11.97	12.21	12.76
	8H	12.76	13.02	13.28	13.52	14.10	12.87	13.13	13.39	13.63	14.21
Variation with the observer position at spacings:											
S = 1.0H	1.0/-1.4					1.0/-1.4					
S = 1.5H	0.8/-1.3					0.8/-1.3					
S = 2.0H	0.9/-1.1					0.9/-1.1					
Standard tables:	BKBF					BKBF					
Uncorrected UGR	-2.2					-2.2					



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	1.03	1.03	1.03	1.01	1.01	1.01	0.97	0.97	0.97	0.92	0.92	0.92	0.89	0.89	0.89	0.87
1	0.98	0.96	0.94	0.96	0.94	0.93	0.92	0.91	0.90	0.89	0.88	0.87	0.86	0.85	0.85	0.83
2	0.93	0.90	0.88	0.91	0.89	0.87	0.89	0.87	0.85	0.86	0.84	0.83	0.84	0.82	0.81	0.80
3	0.89	0.85	0.83	0.87	0.84	0.82	0.85	0.83	0.81	0.83	0.81	0.80	0.81	0.80	0.78	0.77
4	0.85	0.81	0.79	0.84	0.81	0.78	0.82	0.80	0.77	0.81	0.78	0.76	0.79	0.77	0.76	0.75
5	0.82	0.78	0.75	0.81	0.78	0.75	0.80	0.77	0.74	0.78	0.76	0.74	0.77	0.75	0.73	0.72
6	0.79	0.75	0.72	0.78	0.75	0.72	0.77	0.74	0.72	0.76	0.73	0.71	0.75	0.73	0.71	0.70
7	0.76	0.72	0.70	0.76	0.72	0.70	0.75	0.72	0.69	0.74	0.71	0.69	0.73	0.70	0.69	0.68
8	0.74	0.70	0.67	0.73	0.70	0.67	0.72	0.69	0.67	0.72	0.69	0.67	0.71	0.68	0.67	0.66
9	0.71	0.68	0.65	0.71	0.68	0.65	0.70	0.67	0.65	0.70	0.67	0.65	0.69	0.67	0.65	0.64
10	0.69	0.66	0.63	0.69	0.66	0.63	0.68	0.65	0.63	0.68	0.65	0.63	0.67	0.65	0.63	0.62



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	9929.81	10017.00	10047.94	10032.75	9939.94	9743.06	9497.25	9122.63	8709.75
45.0	9929.81	10048.50	10108.13	10099.13	10009.13	9795.94	9533.25	9135.00	8717.06
90.0	9998.44	10031.63	10001.25	9838.13	9614.81	9322.88	8898.19	8388.56	7889.63
135.0	9969.75	9948.94	9843.75	9665.44	9353.25	8964.56	8560.13	8026.31	7511.06
180.0	9929.81	9790.88	9582.75	9223.31	8848.69	8416.13	7799.06	7259.63	6699.38
225.0	9929.81	9772.88	9551.25	9186.75	8803.13	8363.25	7845.19	7280.44	6747.19
270.0	9998.44	9901.13	9745.31	9533.25	9213.19	8802.00	8388.00	7867.13	7378.31
315.0	9969.75	9942.75	9880.31	9704.81	9491.63	9212.06	8807.06	8332.88	7862.63
360.0	9929.81	10017.00	10047.94	10032.75	9939.94	9743.06	9497.25	9122.63	8709.75
C/γ(°)	9.0	10.0	11.0	12.0	13.0	14.0	15.0	16.0	17.0
0.0	8195.06	7615.69	7049.25	6450.75	5706.56	5146.88	4651.31	4151.25	3830.06
45.0	8181.56	7651.69	7007.63	6392.25	5625.00	5078.25	4621.50	4181.63	3850.31
90.0	7278.75	6631.88	6045.75	5411.81	4899.94	4427.44	4060.69	3800.25	3547.13
135.0	6898.50	6246.00	5654.81	5124.94	4546.13	4170.38	3879.00	3579.75	3357.00
180.0	6024.94	5364.00	4838.63	4393.13	3970.13	3627.56	3358.69	3143.25	2940.75
225.0	6114.94	5478.75	4948.31	4433.63	4062.94	3718.13	3418.88	3183.75	2954.25
270.0	6808.50	6206.63	5655.94	5140.69	4595.06	4228.31	3918.38	3573.00	3308.06
315.0	7287.19	6687.56	6119.44	5502.38	5013.00	4536.00	4125.94	3801.38	3533.06
360.0	8195.06	7615.69	7049.25	6450.75	5706.56	5146.88	4651.31	4151.25	3830.06
C/γ(°)	18.0	19.0	20.0	21.0	22.0	23.0	24.0	25.0	26.0
0.0	3569.63	3328.88	3101.06	2901.94	2666.25	2424.94	2149.88	1815.75	1500.19
45.0	3605.63	3399.19	3093.19	2863.69	2658.38	2363.63	2084.63	1823.63	1444.50
90.0	3256.31	3017.81	2786.06	2485.69	2251.69	1990.13	1657.13	1116.84	1050.92
135.0	3129.19	2858.06	2585.81	2359.69	2070.56	1735.31	1445.06	1132.88	883.69
180.0	2696.63	2479.50	2265.19	1947.38	1660.50	1265.63	1090.13	775.74	559.91
225.0	2694.94	2476.13	2273.06	1996.88	1731.38	1437.75	1116.79	827.83	603.90
270.0	3056.63	2804.06	2549.25	2331.00	2094.75	1783.69	1492.31	1177.31	920.81
315.0	3210.19	2981.25	2764.69	2487.38	2278.69	2031.75	1658.81	1119.49	1086.86
360.0	3569.63	3328.88	3101.06	2901.94	2666.25	2424.94	2149.88	1815.75	1500.19
C/γ(°)	27.0	28.0	29.0	30.0	31.0	32.0	33.0	34.0	35.0
0.0	1163.25	866.81	638.44	443.25	301.50	159.92	125.27	88.48	68.57
45.0	1121.06	900.00	615.38	414.00	295.31	146.31	114.19	82.97	63.11
90.0	806.51	562.67	354.60	206.55	146.76	109.41	79.65	62.27	49.05
135.0	621.00	406.69	290.81	159.41	119.14	85.95	66.49	50.96	39.66
180.0	378.51	221.68	146.19	113.23	82.13	61.99	48.15	36.39	29.36
225.0	388.69	242.83	156.21	118.86	90.73	68.34	51.86	40.33	31.89
270.0	652.50	452.81	295.88	182.08	143.10	103.22	80.04	63.45	47.19
315.0	827.33	575.04	373.28	234.51	155.08	118.46	90.56	69.24	54.56
360.0	1163.25	866.81	638.44	443.25	301.50	159.92	125.27	88.48	68.57
C/γ(°)	36.0	37.0	38.0	39.0	40.0	41.0	42.0	43.0	44.0
0.0	53.38	41.29	31.28	26.21	22.84	21.38	20.14	19.07	18.17
45.0	48.66	38.25	29.25	24.64	21.99	20.48	19.46	18.56	17.66
90.0	36.45	29.93	25.65	22.50	21.15	20.08	19.07	18.00	17.16
135.0	31.61	27.17	22.50	20.93	19.97	18.84	17.89	17.27	16.37
180.0	23.85	20.87	19.52	18.45	17.55	16.93	16.43	15.81	15.36
225.0	25.03	21.94	20.25	18.79	17.94	17.21	16.48	15.98	15.47
270.0	38.53	32.29	27.06	24.41	22.78	21.26	19.97	18.90	17.83
315.0	42.19	33.75	28.41	24.81	22.89	21.60	20.48	19.18	18.17
360.0	53.38	41.29	31.28	26.21	22.84	21.38	20.14	19.07	18.17

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	17.38	16.65	16.09	15.64	15.02	14.63	14.23	13.89	13.56
45.0	16.76	16.14	15.47	15.02	14.57	14.12	13.78	13.50	13.16
90.0	16.37	15.69	15.08	14.57	14.12	13.73	13.39	13.16	12.94
135.0	15.64	15.19	14.63	14.29	13.89	13.56	13.33	13.11	12.88
180.0	15.02	14.63	14.29	14.01	13.73	13.44	13.28	13.05	12.88
225.0	14.96	14.63	14.29	13.89	13.67	13.39	13.16	12.99	12.83
270.0	16.99	16.31	15.69	15.19	14.63	14.29	13.89	13.67	13.39
315.0	17.33	16.48	15.81	15.30	14.79	14.34	14.01	13.67	13.44
360.0	17.38	16.65	16.09	15.64	15.02	14.63	14.23	13.89	13.56
C/γ(°)	54.0	55.0	56.0	57.0	58.0	59.0	60.0	61.0	62.0
0.0	13.33	13.11	12.88	12.66	12.54	12.38	12.26	12.15	12.04
45.0	12.88	12.71	12.49	12.38	12.21	12.09	11.93	11.87	11.76
90.0	12.71	12.54	12.43	12.32	12.15	12.04	11.98	11.87	11.81
135.0	12.71	12.60	12.43	12.38	12.26	12.15	12.09	12.04	12.04
180.0	12.71	12.60	12.54	12.43	12.32	12.38	12.32	12.38	12.43
225.0	12.66	12.60	12.49	12.38	12.32	12.26	12.21	12.32	12.38
270.0	13.22	13.11	12.88	12.77	12.66	12.54	12.43	12.38	12.26
315.0	13.11	12.99	12.83	12.66	12.54	12.43	12.26	12.21	12.09
360.0	13.33	13.11	12.88	12.66	12.54	12.38	12.26	12.15	12.04
C/γ(°)	63.0	64.0	65.0	66.0	67.0	68.0	69.0	70.0	71.0
0.0	11.98	11.93	11.87	11.87	11.81	11.76	11.70	11.64	11.59
45.0	11.64	11.64	11.59	11.59	11.53	11.48	11.48	11.42	11.31
90.0	11.76	11.70	11.64	11.59	11.53	11.53	11.48	11.48	11.42
135.0	12.04	12.04	11.98	11.98	11.93	11.93	11.87	11.87	11.87
180.0	12.43	12.49	12.54	12.49	12.49	12.49	12.43	12.43	12.38
225.0	12.38	12.43	12.43	12.38	12.38	12.32	12.32	12.26	12.21
270.0	12.26	12.21	12.15	12.09	12.09	11.98	11.98	11.93	11.87
315.0	12.04	11.98	11.93	11.87	11.76	11.76	11.70	11.64	11.59
360.0	11.98	11.93	11.87	11.87	11.81	11.76	11.70	11.64	11.59
C/γ(°)	72.0	73.0	74.0	75.0	76.0	77.0	78.0	79.0	80.0
0.0	11.53	11.48	11.42	11.36	11.31	11.19	11.14	11.08	10.97
45.0	11.31	11.25	11.19	11.14	11.08	11.08	10.97	10.91	10.86
90.0	11.36	11.31	11.25	11.25	11.19	11.14	11.03	10.91	10.86
135.0	11.81	11.70	11.59	11.48	11.36	11.25	11.14	11.08	10.91
180.0	12.32	12.21	12.09	12.04	11.76	11.64	11.48	11.31	11.14
225.0	12.15	11.98	11.81	11.59	11.36	11.19	11.08	10.97	10.86
270.0	11.76	11.64	11.53	11.42	11.25	11.08	10.97	10.86	10.69
315.0	11.53	11.48	11.36	11.31	11.19	11.14	11.03	10.86	10.80
360.0	11.53	11.48	11.42	11.36	11.31	11.19	11.14	11.08	10.97
C/γ(°)	81.0	82.0	83.0	84.0	85.0	86.0	87.0	88.0	89.0
0.0	10.91	10.80	10.74	10.69	10.63	10.58	10.58	10.52	10.41
45.0	10.74	10.69	10.58	10.52	10.46	10.46	10.41	10.24	10.18
90.0	10.74	10.58	10.52	10.41	10.29	10.24	10.01	9.96	9.84
135.0	10.74	10.58	10.52	10.35	10.29	10.24	10.07	10.01	9.84
180.0	11.03	10.97	10.91	10.91	10.86	10.58	10.29	10.07	10.01
225.0	10.80	10.69	10.58	10.58	10.52	10.46	10.35	10.01	9.90
270.0	10.58	10.52	10.35	10.29	10.24	10.18	10.13	10.07	9.84
315.0	10.69	10.58	10.52	10.41	10.29	10.29	10.24	10.13	10.01
360.0	10.91	10.80	10.74	10.69	10.63	10.58	10.58	10.52	10.41

Intensity data(cd)

C/ γ (°)	90.0
0.0	10.35
45.0	10.13
90.0	9.84
135.0	9.84
180.0	9.96
225.0	9.96
270.0	9.84
315.0	9.84
360.0	10.35