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## NATA

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LumCAT: 1654-N	
Luminaire: 92.70.064.00	
Report No: NATA0100	Voltage(V): 34.7000
Test No: GC2019011112	Current(A): 0.3100
LampCAT: SEOUL SAWx10 LES9.8	Power (W): 10.7570
Lamp flux(lm): 1626.0	PF: 0.0000
Number of Lamps: 1	Ballast type: DC
Length(mm): 32	Width(mm): 32
Phm Type: C	Height(mm): 0

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## Photometric Results

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Lumens(lm): 1435.82  
Efficiency(%): 88.30%  
Lumens(lm)/Power(W): 133.57  
Central intensity(cd): 4376.531  
Maximum intensity(cd): 4376.531  
Angle of maximum intensity: C=0.0  $\gamma$ =0.0  
Beam Angle(50%Imax): [C0/180]Total=27.9  
                                  [C90/270]Total=27.9  
Field angle(10%Imax): [C0/180]Total=61.2  
                                  [C90/270]Total=61.2  
Maximum s/h(1/2): C0\_180=0.47 C90\_270=0.47  
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(%): 88.36%  
Up flux rate of LUM(%): - -  
Down flux rate of LUM(%): 100.00%  
CIE Type : Direct lighting  
Output flux ratio in  $\pi$  solid angle : 98.068%

$\gamma(^{\circ})$	Average I(cd)	Zonal F(lm)	Sum F(lm)	Eff Flux(%)	Eff Sum(%)
0.0	4376.531	1.047	1.047	.064%	.073%
1.0	4365.773	8.355	9.402	.514%	.655%
2.0	4331.039	16.575	25.978	1.019%	1.809%
3.0	4276.336	24.543	50.521	1.509%	3.519%
4.0	4214.461	32.239	82.759	1.983%	5.764%
5.0	4117.992	39.358	122.117	2.421%	8.505%
6.0	3987.984	45.713	167.83	2.811%	11.689%
7.0	3821.906	51.077	218.907	3.141%	15.246%
8.0	3627.633	55.364	274.272	3.405%	19.102%
9.0	3397.922	58.290	332.562	3.585%	23.162%
10.0	3153.586	60.052	392.614	3.693%	27.344%
11.0	2913.117	60.955	453.569	3.749%	31.590%
12.0	2666.742	60.801	514.37	3.739%	35.824%
13.0	2411.930	59.498	573.869	3.659%	39.968%
14.0	2176.523	57.742	631.61	3.551%	43.990%
15.0	1959.961	55.628	687.239	3.421%	47.864%
16.0	1754.438	53.031	740.269	3.261%	51.557%
17.0	1558.055	49.954	790.223	3.072%	55.036%
18.0	1373.189	46.533	836.757	2.862%	58.277%
19.0	1236.234	44.136	880.893	2.714%	61.351%
20.0	1100.862	41.289	922.182	2.539%	64.227%
21.0	1000.863	39.333	961.515	2.419%	66.966%
22.0	915.680	37.616	999.131	2.313%	69.586%
23.0	841.219	36.044	1035.175	2.217%	72.096%
24.0	774.970	34.566	1069.741	2.126%	74.504%
25.0	721.814	33.452	1103.193	2.057%	76.834%
26.0	676.498	32.521	1135.714	2.000%	79.099%
27.0	624.959	31.114	1166.828	1.914%	81.266%
28.0	572.787	29.489	1196.316	1.814%	83.319%
29.0	521.691	27.735	1224.052	1.706%	85.251%
30.0	469.448	25.740	1249.792	1.583%	87.044%
31.0	418.373	23.630	1273.421	1.453%	88.690%
32.0	365.393	21.234	1294.655	1.306%	90.168%
33.0	317.166	18.943	1313.598	1.165%	91.488%
34.0	278.845	17.099	1330.697	1.052%	92.679%
35.0	230.899	14.523	1345.22	.893%	93.690%
36.0	182.686	11.775	1356.996	.724%	94.510%
37.0	146.960	9.699	1366.694	.596%	95.186%

$\gamma(^{\circ})$	Average I(cd)	Zonal F(lm)	Sum F(lm)	Eff Flux(%)	Eff Sum(%)
38.0	110.398	7.453	1374.148	.458%	95.705%
39.0	78.110	5.391	1379.538	.332%	96.080%
40.0	54.731	3.858	1383.396	.237%	96.349%
41.0	38.559	2.774	1386.17	.171%	96.542%
42.0	29.299	2.150	1388.32	.132%	96.692%
43.0	24.089	1.802	1390.122	.111%	96.817%
44.0	20.756	1.581	1391.703	.097%	96.927%
45.0	18.113	1.404	1393.108	.086%	97.025%
46.0	16.390	1.293	1394.4	.080%	97.115%
47.0	15.293	1.227	1395.627	.075%	97.201%
48.0	14.562	1.187	1396.814	.073%	97.283%
49.0	13.802	1.142	1397.956	.070%	97.363%
50.0	13.113	1.102	1399.057	.068%	97.440%
51.0	12.586	1.073	1400.13	.066%	97.514%
52.0	12.108	1.046	1401.176	.064%	97.587%
53.0	11.735	1.028	1402.204	.063%	97.659%
54.0	11.454	1.016	1403.22	.062%	97.730%
55.0	11.159	1.002	1404.223	.062%	97.799%
56.0	10.870	0.988	1405.211	.061%	97.868%
57.0	10.617	0.976	1406.187	.060%	97.936%
58.0	10.364	0.964	1407.151	.059%	98.003%
59.0	10.174	0.956	1408.108	.059%	98.070%
60.0	9.970	0.947	1409.054	.058%	98.136%
61.0	9.773	0.937	1409.992	.058%	98.201%
62.0	9.534	0.923	1410.915	.057%	98.265%
63.0	9.338	0.912	1411.827	.056%	98.329%
64.0	9.218	0.909	1412.736	.056%	98.392%
65.0	9.141	0.908	1413.644	.056%	98.456%
66.0	9.000	0.902	1414.546	.055%	98.518%
67.0	8.817	0.890	1415.436	.055%	98.580%
68.0	8.719	0.886	1416.322	.055%	98.642%
69.0	8.634	0.884	1417.206	.054%	98.704%
70.0	8.543	0.880	1418.087	.054%	98.765%
71.0	8.438	0.875	1418.962	.054%	98.826%
72.0	8.360	0.872	1419.834	.054%	98.887%
73.0	8.297	0.870	1420.704	.054%	98.947%
74.0	8.255	0.870	1421.574	.054%	99.008%
75.0	8.234	0.872	1422.446	.054%	99.069%

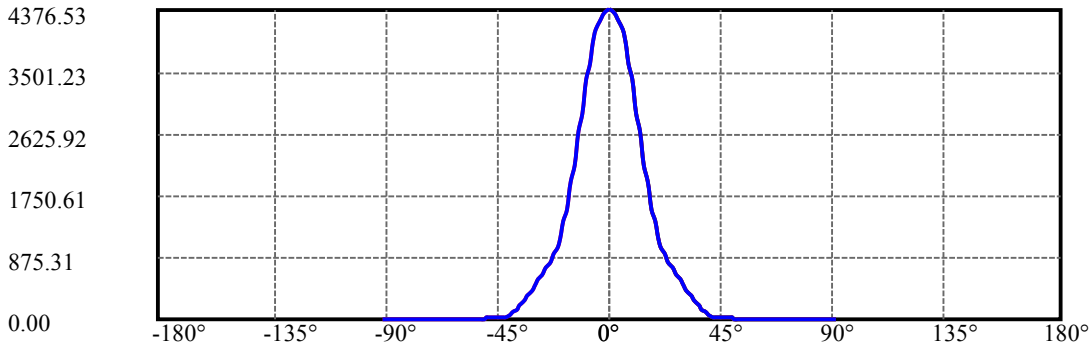
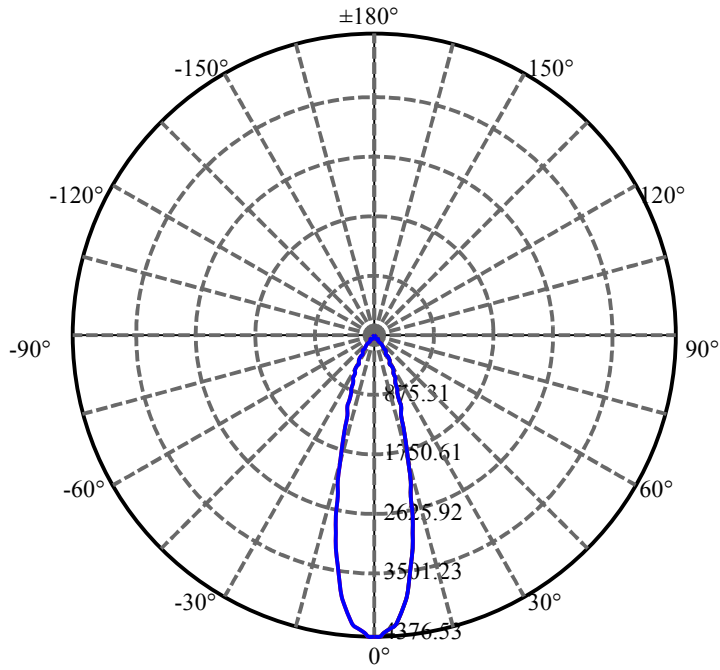
$\gamma(^{\circ})$	Average I(cd)	Zonal F(lm)	Sum F(lm)	Eff Flux(%)	Eff Sum(%)
76.0	8.445	0.899	1423.344	.055%	99.131%
77.0	8.782	0.938	1424.283	.058%	99.197%
78.0	9.155	0.982	1425.265	.060%	99.265%
79.0	9.696	1.044	1426.309	.064%	99.338%
80.0	10.146	1.096	1427.404	.067%	99.414%
81.0	10.216	1.107	1428.511	.068%	99.491%
82.0	9.942	1.080	1429.59	.066%	99.566%
83.0	8.655	0.942	1430.533	.058%	99.632%
84.0	8.487	0.926	1431.458	.057%	99.696%
85.0	8.641	0.944	1432.402	.058%	99.762%
86.0	8.634	0.945	1433.347	.058%	99.828%
87.0	6.891	0.755	1434.101	.046%	99.880%
88.0	6.335	0.694	1434.796	.043%	99.929%
89.0	6.244	0.685	1435.48	.042%	99.976%
90.0	6.188	0.339	1435.819	.021%	100.000%

ZONAL LUMEN SUMMARY

Zone	Lumens	%Lamp	%Fixt
0-30	1249.79	76.86%	87.04%
0-40	1383.40	85.08%	96.35%
0-60	1409.05	86.66%	98.14%
0-90	1435.48	88.28%	99.98%
0-120	1435.48	88.28%	99.98%
0-180	1435.82	88.30%	100.00%
60-90	27.37	1.68%	1.91%
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%
0-26.42	1148.66	70.64%	80.00%

ZONAL LUMEN SUMMARY

0-10	392.61
10-20	529.57
20-30	327.61
30-40	133.60
40-50	15.66
50-60	10.00
60-70	9.03
70-80	9.32
80-90	8.08
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

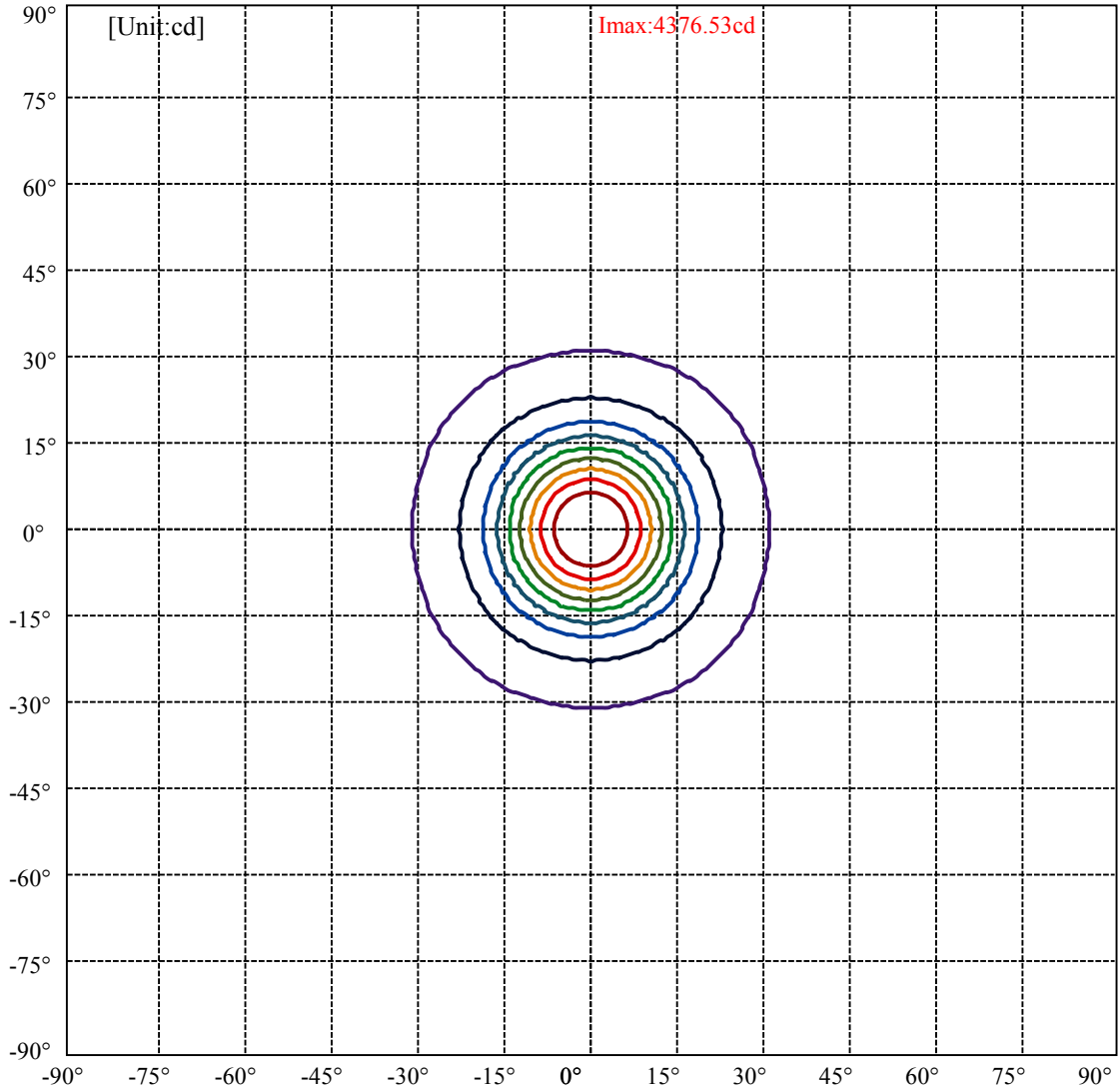


C0(Max): ———  
C0/C180: ———  
C90/C270: ———

Field angle(10%Imax):C0/180Left:30.6 Right:30.6  
:C90/270Left:30.6 Right:30.6

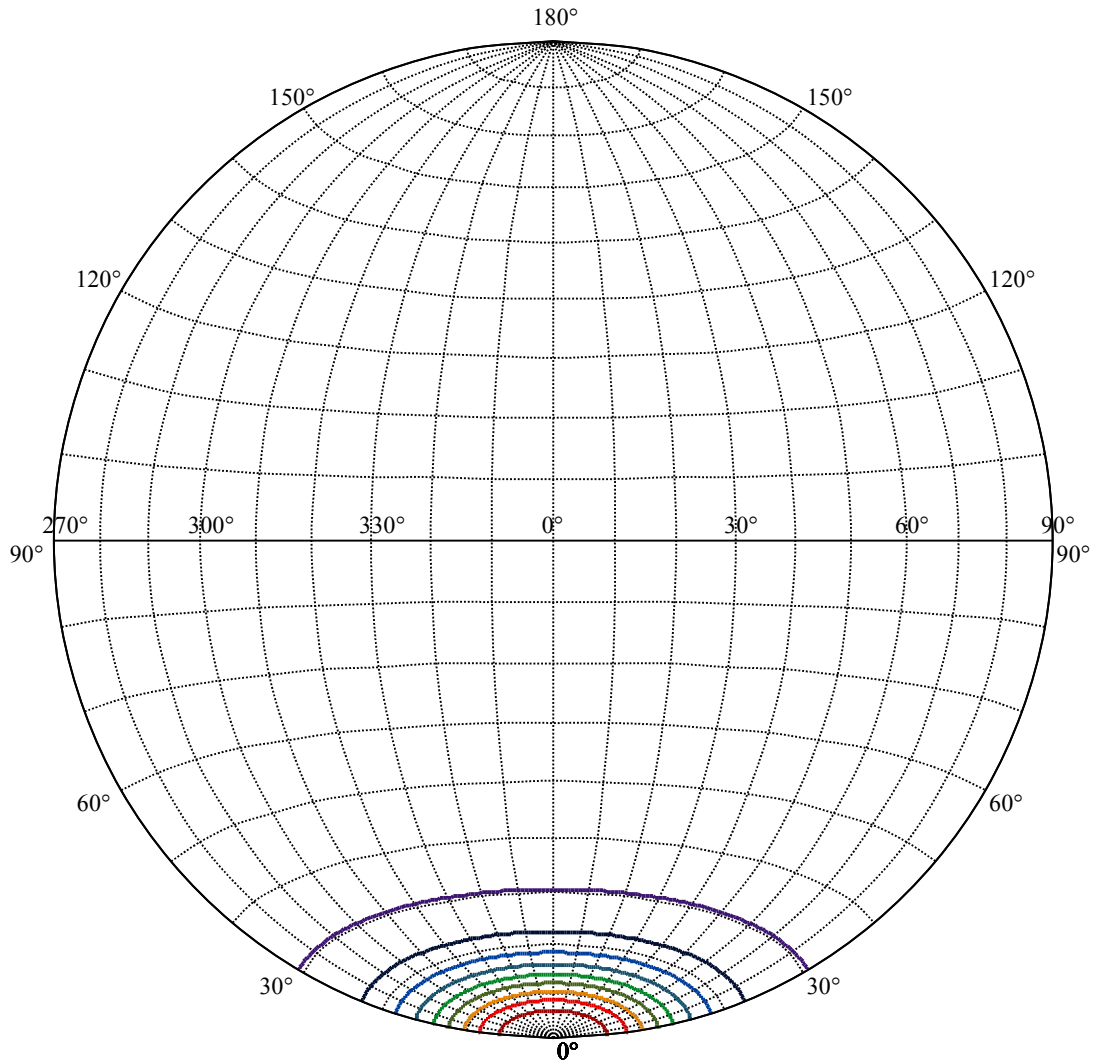
Beam Angle(50%Imax):C0/180Left:14.0 Right:14.0  
:C90/270Left:14.0 Right:14.0





(10%Imax) 437.653	—
(20%Imax) 875.306	—
(30%Imax) 1312.96	—
(40%Imax) 1750.61	—
(50%Imax) 2188.27	—
(60%Imax) 2625.92	—
(70%Imax) 3063.57	—
(80%Imax) 3501.23	—
(90%Imax) 3938.88	—





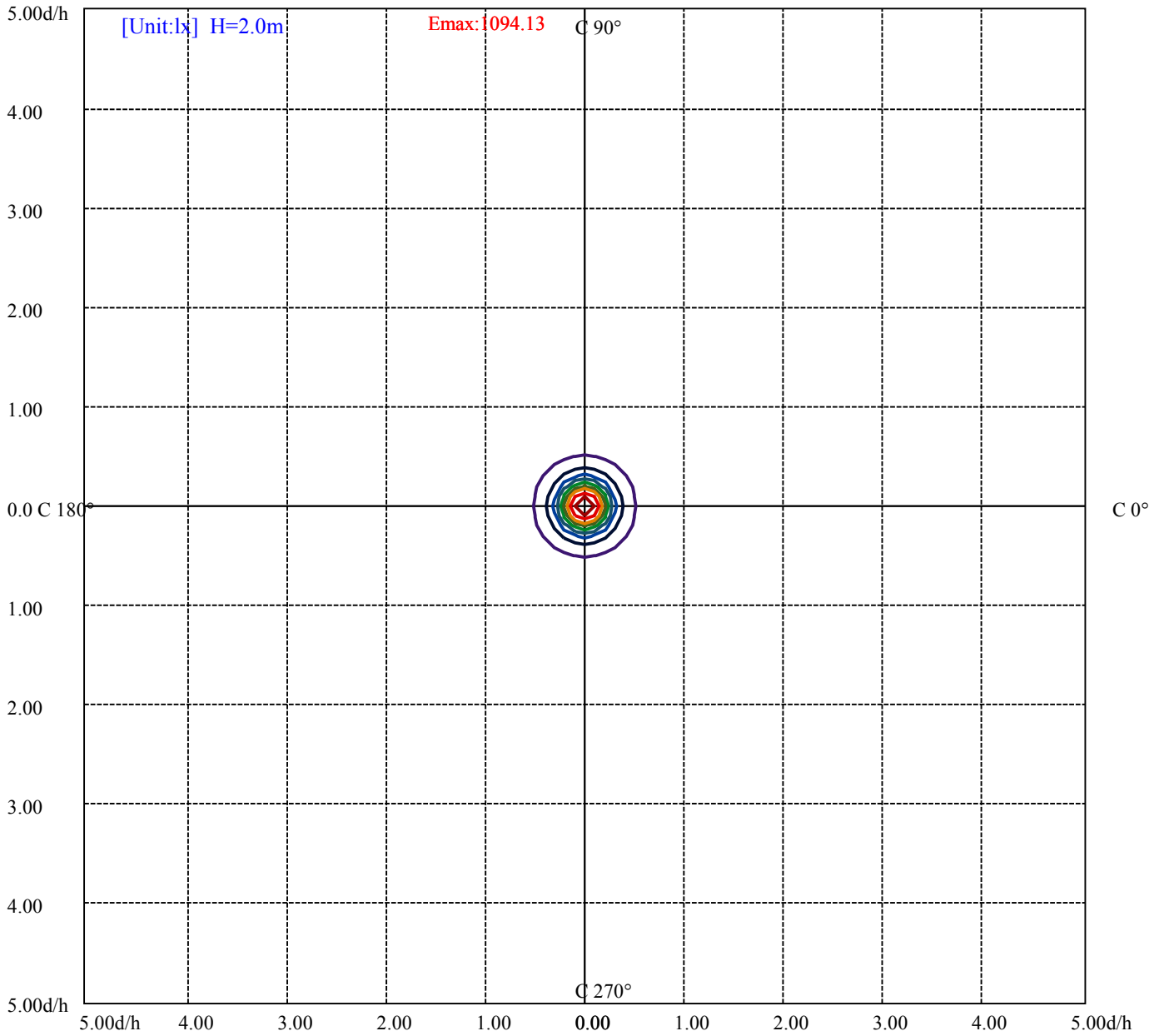
House

[Unit:cd]

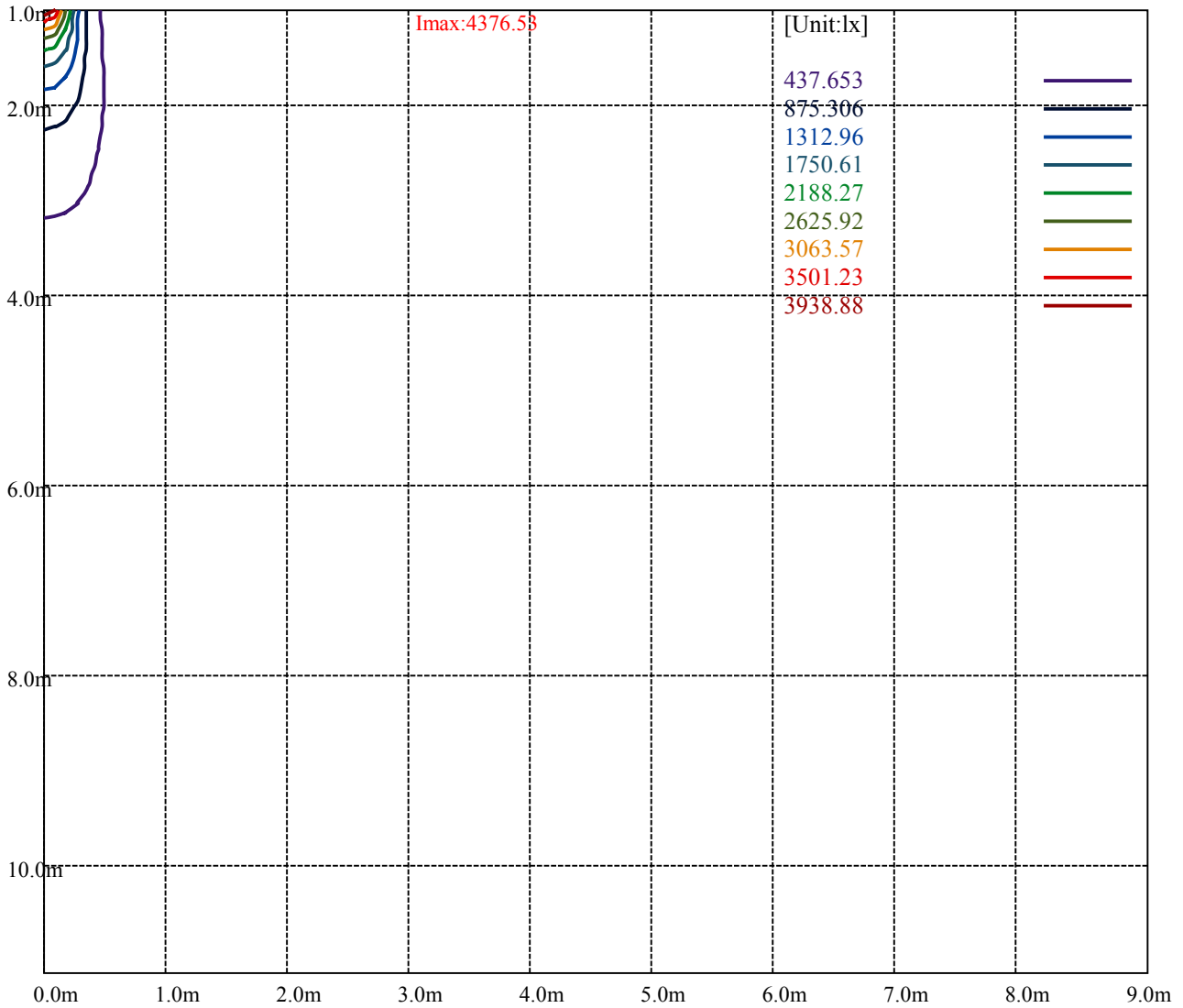
Road

**Imax:4376.53**

(10%Imax) 437.653	—
(20%Imax) 875.306	—
(30%Imax) 1312.96	—
(40%Imax) 1750.61	—
(50%Imax) 2188.27	—
(60%Imax) 2625.92	—
(70%Imax) 3063.57	—
(80%Imax) 3501.23	—
(90%Imax) 3938.88	—



(10%E_max)	109.4133	—
(20%E_max)	218.8265	—
(30%E_max)	328.24	—
(40%E_max)	437.6525	—
(50%E_max)	547.065	—
(60%E_max)	656.48	—
(70%E_max)	765.8925	—
(80%E_max)	875.305	—
(90%E_max)	984.72	—



Luminance Table

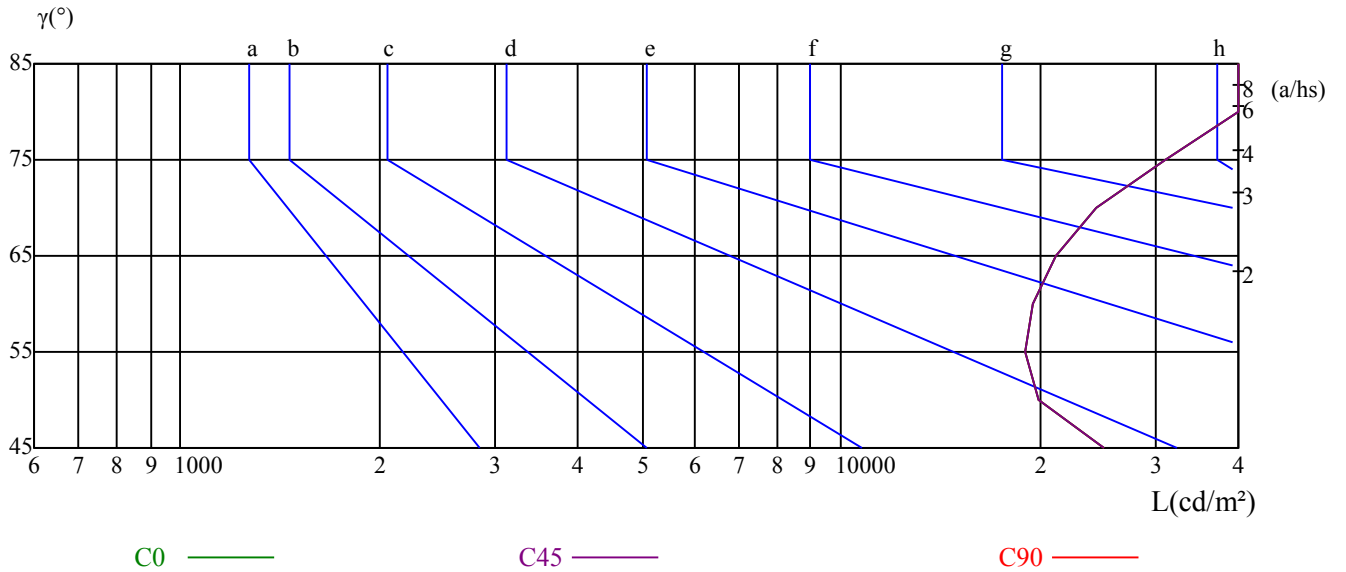
$\gamma$	45	50	55	60	65	70	75	80	85
C0	25015	19923	18998	19473	21122	24393	31067	57060	96825
C45	25015	19923	18998	19473	21122	24393	31067	57060	96825
C90	25015	19923	18998	19473	21122	24393	31067	57060	96825

L(Hor)(65)	L(Ver)(65)	L45(65)	L(Hor)(75)	L(Ver)(75)	L45(75)	L(Hor)(85)	L(Ver)(85)	L45(85)
21122	21122	21122	31067	31067	31067	96825	96825	96825

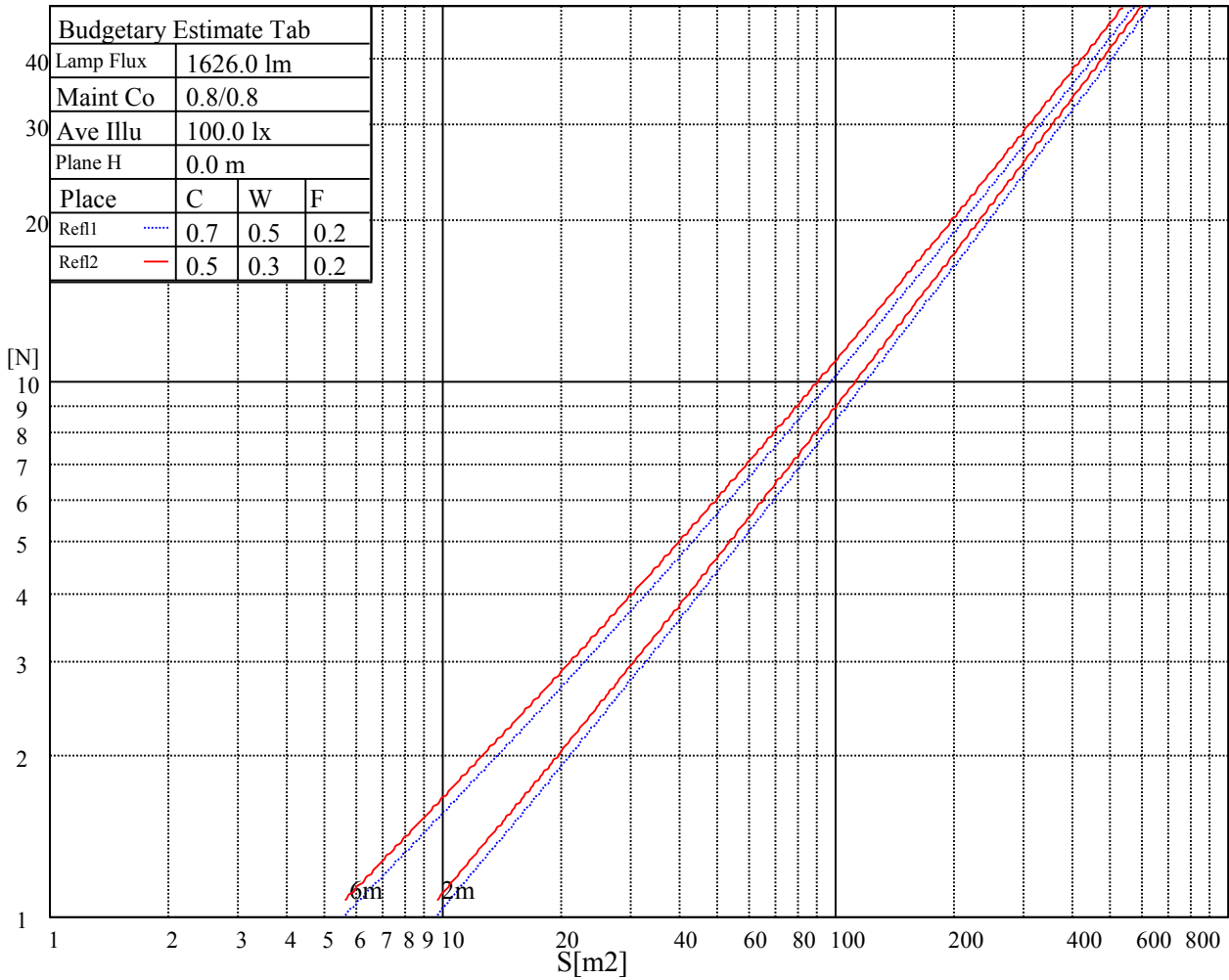
Glare Table

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

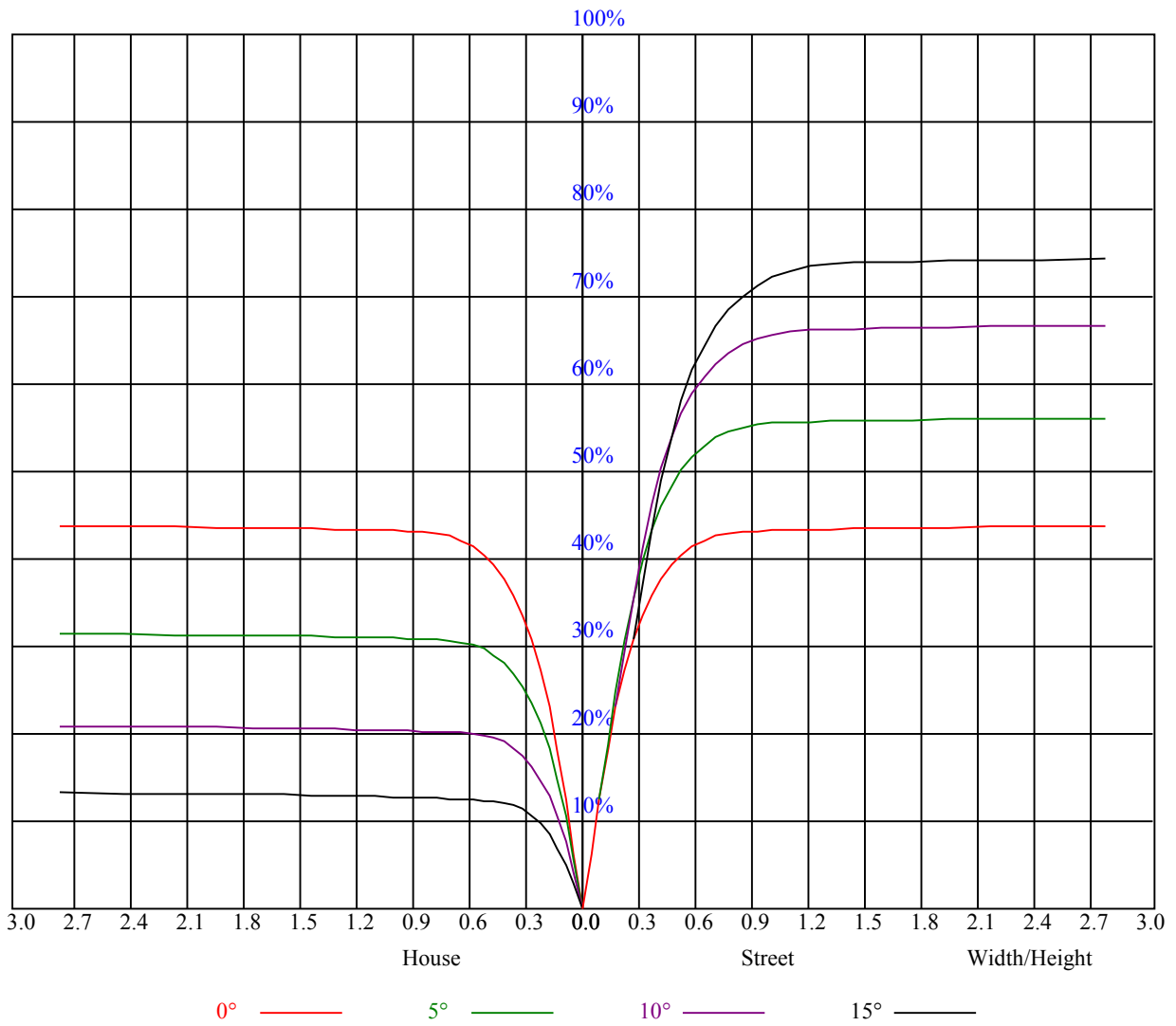
Luminance Limiting Curve



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	11.72	12.65	12.09	12.97	13.28	10.82	11.75	11.18	12.06	12.38
	3H	14.22	15.05	14.61	15.38	15.75	13.76	14.58	14.15	14.92	15.29
	4H	15.67	16.43	16.08	16.79	17.18	15.39	16.15	15.79	16.50	16.89
	6H	17.93	18.63	18.35	19.01	19.41	17.87	18.56	18.29	18.94	19.34
	8H	19.12	19.77	19.56	20.17	20.58	19.13	19.79	19.57	20.18	20.59
	12H	20.79	21.41	21.22	21.80	22.23	20.88	21.51	21.32	21.89	22.32
4H	2H	12.36	13.12	12.76	13.47	13.86	11.69	12.46	12.10	12.81	13.20
	3H	15.18	15.81	15.60	16.22	16.62	14.87	15.50	15.29	15.91	16.31
	4H	16.85	17.41	17.29	17.84	18.29	16.68	17.24	17.12	17.66	18.11
	6H	19.10	19.58	19.57	20.03	20.51	19.08	19.56	19.55	20.01	20.49
	8H	20.49	20.93	20.96	21.38	21.86	20.54	20.98	21.01	21.43	21.91
	12H	22.12	22.51	22.62	23.00	23.48	22.24	22.62	22.73	23.11	23.59
8H	4H	17.61	18.06	18.09	18.51	18.98	17.48	17.93	17.96	18.38	18.85
	6H	20.26	20.61	20.77	21.11	21.60	20.26	20.61	20.77	21.12	21.60
	8H	21.77	22.09	22.31	22.61	23.11	21.83	22.15	22.37	22.67	23.17
	12H	23.49	23.76	24.01	24.26	24.84	23.59	23.86	24.12	24.36	24.94
12H	4H	17.90	18.28	18.39	18.77	19.25	17.77	18.16	18.27	18.65	19.13
	6H	20.86	20.95	21.17	21.42	21.97	20.86	20.95	21.17	21.42	21.97
	8H	22.25	22.52	22.77	23.02	23.60	22.30	22.57	22.82	23.07	23.65
Variation with the observer position at spacings:											
S = 1.0H		4.9/-4.1					4.9/-4.1				
S = 1.5H		5.9/-3.1					5.9/-3.1				
S = 2.0H		6.5/-2.0					6.5/-2.0				
Standard tables:		BKBF					BKBF				
Uncorrected UGR		8.2					8.2				



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	1.05	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	0.93	0.93	0.92	0.90	0.90	0.89	0.88	0.87	0.86	0.85	0.84
2	0.93	0.90	0.87	0.92	0.89	0.86	0.89	0.87	0.85	0.86	0.84	0.83	0.84	0.82	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	0.80	0.78	0.81	0.79	0.77	0.76
4	0.84	0.80	0.77	0.83	0.79	0.76	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	0.79	0.76	0.73	0.78	0.75	0.72	0.77	0.74	0.71	0.75	0.73	0.71	0.70
6	0.77	0.73	0.69	0.76	0.72	0.69	0.75	0.71	0.69	0.74	0.71	0.68	0.73	0.70	0.68	0.67
7	0.74	0.69	0.66	0.73	0.69	0.66	0.72	0.69	0.66	0.71	0.68	0.66	0.70	0.67	0.65	0.64
8	0.71	0.67	0.64	0.70	0.66	0.64	0.70	0.66	0.63	0.69	0.66	0.63	0.68	0.65	0.63	0.62
9	0.68	0.64	0.61	0.68	0.64	0.61	0.67	0.64	0.61	0.66	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	0.61	0.59	0.64	0.61	0.59	0.64	0.61	0.59	0.58





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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	4366.13	4372.88	4361.06	4323.94	4268.81	4189.50	4104.56	3981.38	3803.06
45.0	4371.75	4358.81	4322.25	4268.25	4198.50	4092.19	3967.31	3779.44	3582.56
90.0	4384.13	4351.50	4295.81	4230.00	4146.75	4014.56	3830.63	3635.44	3391.88
135.0	4384.13	4365.00	4309.31	4257.56	4185.56	4071.38	3933.00	3740.06	3531.94
180.0	4366.13	4335.75	4285.69	4201.88	4139.44	4039.31	3874.50	3656.81	3447.56
225.0	4371.75	4358.25	4330.69	4271.06	4208.63	4127.63	4005.00	3844.69	3662.44
270.0	4384.13	4394.81	4380.75	4351.50	4308.75	4226.06	4124.25	4003.88	3828.94
315.0	4384.13	4389.19	4362.75	4306.50	4259.25	4183.31	4064.63	3933.56	3772.69
360.0	4366.13	4372.88	4361.06	4323.94	4268.81	4189.50	4104.56	3981.38	3803.06

C/γ(°)	9.0	10.0	11.0	12.0	13.0	14.0	15.0	16.0	17.0
0.0	3578.63	3337.88	3129.19	2871.00	2605.50	2375.44	2151.00	1896.19	1709.44
45.0	3340.13	3083.06	2842.31	2601.56	2313.56	2096.44	1893.94	1684.13	1491.19
90.0	3162.38	2893.50	2626.31	2403.00	2158.88	1932.19	1743.19	1569.94	1370.81
135.0	3284.44	3021.19	2785.50	2549.81	2266.31	2054.81	1857.94	1656.00	1463.63
180.0	3198.94	2943.56	2703.94	2452.50	2234.25	2003.06	1785.94	1604.81	1441.13
225.0	3439.69	3221.44	2968.31	2698.88	2465.44	2213.44	1976.06	1777.50	1591.31
270.0	3621.94	3407.63	3161.25	2930.63	2663.44	2400.75	2174.63	1959.19	1713.94
315.0	3557.25	3320.44	3088.13	2826.56	2588.06	2336.06	2097.00	1887.75	1683.00
360.0	3578.63	3337.88	3129.19	2871.00	2605.50	2375.44	2151.00	1896.19	1709.44

C/γ(°)	18.0	19.0	20.0	21.0	22.0	23.0	24.0	25.0	26.0
0.0	1544.06	1370.81	1221.19	1112.06	1005.75	918.00	849.38	788.63	739.69
45.0	1335.94	1199.81	1060.88	967.50	884.25	801.00	747.00	699.19	649.69
90.0	1119.26	1105.26	988.71	893.03	819.73	751.78	694.58	646.71	593.61
135.0	1306.69	1158.19	1049.63	958.50	868.50	805.50	748.13	698.63	657.00
180.0	1254.94	1117.18	1027.80	912.60	853.43	796.50	747.96	692.55	653.34
225.0	1390.50	1208.81	1121.18	994.28	912.04	836.49	764.04	708.02	663.92
270.0	1538.44	1384.31	1225.13	1095.19	997.88	912.94	826.31	771.19	729.56
315.0	1495.69	1345.50	1112.40	1073.76	983.87	907.54	822.38	769.61	725.18
360.0	1544.06	1370.81	1221.19	1112.06	1005.75	918.00	849.38	788.63	739.69

C/γ(°)	27.0	28.0	29.0	30.0	31.0	32.0	33.0	34.0	35.0
0.0	688.50	633.94	582.19	530.44	474.19	420.19	367.88	306.56	284.63
45.0	600.19	554.63	500.63	452.25	401.63	349.88	306.00	284.06	214.26
90.0	543.88	489.32	438.13	390.21	344.31	291.21	251.33	214.59	172.13
135.0	612.00	549.56	501.75	453.38	392.63	344.25	299.25	284.06	201.77
180.0	601.59	551.48	492.24	445.61	386.83	328.56	284.06	238.39	194.91
225.0	613.24	565.09	512.21	459.84	414.34	365.46	318.04	276.64	236.36
270.0	671.63	617.06	574.31	515.81	469.69	415.69	363.94	320.06	287.44
315.0	668.64	621.23	572.06	508.05	463.39	407.93	346.84	306.39	255.71
360.0	688.50	633.94	582.19	530.44	474.19	420.19	367.88	306.56	284.63

C/γ(°)	36.0	37.0	38.0	39.0	40.0	41.0	42.0	43.0	44.0
0.0	216.68	171.68	125.04	92.36	60.08	40.33	28.35	21.43	17.94
45.0	176.68	140.79	99.73	71.49	48.88	31.95	24.41	21.26	17.55
90.0	140.23	111.54	80.10	56.53	40.67	30.26	27.73	24.53	21.77
135.0	163.07	128.76	90.00	63.34	44.94	33.08	27.51	24.69	21.04
180.0	149.91	115.26	86.91	58.67	40.73	31.28	26.44	22.73	19.74
225.0	182.42	152.38	120.21	86.29	59.29	43.43	32.34	27.39	24.92
270.0	224.94	186.92	149.68	111.15	82.80	57.09	38.03	29.03	24.81
315.0	207.56	168.36	131.51	85.05	60.47	41.06	29.59	21.66	18.28
360.0	216.68	171.68	125.04	92.36	60.08	40.33	28.35	21.43	17.94

NATA 1654-N

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	14.29	12.32	11.42	10.91	10.41	9.96	9.73	9.51	9.23
45.0	15.13	13.89	13.11	12.77	12.26	11.81	11.36	11.36	11.14
90.0	20.87	19.69	18.68	18.06	17.33	16.43	15.69	15.02	14.51
135.0	19.07	17.66	16.26	15.24	14.18	13.44	12.94	12.26	11.87
180.0	18.00	16.31	14.91	14.12	13.11	12.43	11.87	11.36	10.97
225.0	22.16	20.93	19.86	18.90	17.94	16.82	15.92	14.91	14.23
270.0	21.15	17.94	16.54	15.47	14.68	13.95	13.44	12.94	12.66
315.0	14.23	12.38	11.59	11.03	10.52	10.07	9.73	9.51	9.28
360.0	14.29	12.32	11.42	10.91	10.41	9.96	9.73	9.51	9.23
C/γ(°)	54.0	55.0	56.0	57.0	58.0	59.0	60.0	61.0	62.0
0.0	9.06	8.89	8.72	8.61	8.55	8.44	8.33	8.27	8.21
45.0	11.08	10.97	10.86	10.80	10.63	10.41	10.29	10.18	9.84
90.0	13.84	13.39	12.94	12.38	11.76	11.48	11.19	10.80	10.24
135.0	11.59	11.42	11.14	10.97	10.80	10.74	10.63	10.46	10.24
180.0	10.69	10.52	10.35	10.18	10.07	10.01	9.96	9.79	9.68
225.0	13.78	13.11	12.54	12.09	11.53	11.14	10.69	10.29	9.96
270.0	12.49	12.09	11.70	11.31	11.08	10.80	10.35	10.13	9.96
315.0	9.11	8.89	8.72	8.61	8.49	8.38	8.33	8.27	8.16
360.0	9.06	8.89	8.72	8.61	8.55	8.44	8.33	8.27	8.21
C/γ(°)	63.0	64.0	65.0	66.0	67.0	68.0	69.0	70.0	71.0
0.0	8.10	8.16	8.16	8.16	8.10	8.16	8.16	8.10	8.04
45.0	9.62	9.45	9.34	9.06	8.83	8.72	8.61	8.44	8.33
90.0	10.13	9.96	9.73	9.51	9.28	9.17	9.06	8.94	8.83
135.0	10.07	10.07	9.96	9.84	9.62	9.56	9.45	9.39	9.28
180.0	9.56	9.45	9.45	9.34	9.23	9.11	9.06	9.00	8.83
225.0	9.51	9.34	9.28	9.00	8.72	8.61	8.44	8.33	8.21
270.0	9.62	9.23	9.11	9.06	8.78	8.55	8.44	8.33	8.16
315.0	8.10	8.10	8.10	8.04	7.99	7.88	7.88	7.82	7.82
360.0	8.10	8.16	8.16	8.16	8.10	8.16	8.16	8.10	8.04
C/γ(°)	72.0	73.0	74.0	75.0	76.0	77.0	78.0	79.0	80.0
0.0	8.04	8.04	7.99	7.99	7.93	7.93	7.82	7.71	7.71
45.0	8.21	8.16	8.10	7.99	7.93	7.88	7.93	8.21	8.78
90.0	8.78	8.72	8.66	8.78	9.39	10.29	11.42	12.32	12.83
135.0	9.23	9.17	9.11	9.23	10.07	11.25	12.38	13.78	14.91
180.0	8.72	8.66	8.61	8.61	9.17	9.90	10.86	12.49	13.22
225.0	8.10	7.99	7.93	7.82	7.71	7.71	7.71	7.93	8.72
270.0	7.99	7.88	7.88	7.76	7.71	7.65	7.59	7.59	7.54
315.0	7.82	7.76	7.76	7.71	7.65	7.65	7.54	7.54	7.48
360.0	8.04	8.04	7.99	7.99	7.93	7.93	7.82	7.71	7.71
C/γ(°)	81.0	82.0	83.0	84.0	85.0	86.0	87.0	88.0	89.0
0.0	7.76	8.10	7.93	7.76	8.10	8.38	6.53	6.53	6.47
45.0	9.17	9.11	7.88	7.99	8.27	8.44	6.30	6.24	6.19
90.0	12.66	11.48	9.00	9.39	9.68	9.56	6.30	6.13	6.08
135.0	15.02	14.29	11.25	10.58	10.35	10.46	10.29	6.41	6.30
180.0	13.11	12.38	9.62	9.45	9.62	9.73	6.53	6.41	6.30
225.0	9.17	9.34	8.61	7.88	8.10	8.21	6.24	6.19	6.08
270.0	7.48	7.48	7.65	7.43	7.43	7.54	6.47	6.36	6.24
315.0	7.37	7.37	7.31	7.43	7.59	6.75	6.47	6.41	6.30
360.0	7.76	8.10	7.93	7.76	8.10	8.38	6.53	6.53	6.47

Intensity data(cd)

C/γ(°)	90.0
0.0	6.47
45.0	6.08
90.0	6.02
135.0	6.13
180.0	6.19
225.0	6.13
270.0	6.24
315.0	6.24
360.0	6.47