



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: 1676-A
Luminaire: 92.70.188.00+92.70.147.00
Report No: NATA0100
Test No: GC2019011404
LampCAT: LUMILEDS LUXEON 1203
Lamp flux(lm): 1246.0
Number of Lamps: 1
Length(mm): 46
Phm Type: C
Voltage(V): 35.3000
Current(A): 0.3000
Power (W): 10.5900
PF: 0.0000
Ballast type: DC
Width(mm): 46
Height(mm): 0

Photometric Results

Lumens(lm): 1010.79
Efficiency(%): 81.12%
Lumens(lm)/Power(W): 95.55
Central intensity(cd): 4811.344
Maximum intensity(cd): 4811.344
Angle of maximum intensity: $C=0.0 \gamma=0.0$
Beam Angle(50%Imax): [C0/180]Total=20.1
[C90/270]Total=20.1
Field angle(10%Imax): [C0/180]Total=43.4
[C90/270]Total=43.4
Maximum s/h(1/2): C0_180=0.34 C90_270=0.34
Maximum s/h(1/4): C0_180=0.34 C90_270=0.34
Up flux rate of lamp(%): 0.00%
Down flux rate of lamp(%): 81.21%
Up flux rate of LUM(%): - -
Down flux rate of LUM(%): 100.00%
CIE Type : Direct lighting
Output flux ratio in π solid angle : 97.065%

$\gamma(^{\circ})$	Average I(cd)	Zonal F(lm)	Sum F(lm)	Eff Flux(%)	Eff Sum(%)
0.0	4811.344	1.151	1.151	.092%	.114%
1.0	4791.234	9.170	10.321	.736%	1.021%
2.0	4715.859	18.048	28.369	1.448%	2.807%
3.0	4572.492	26.242	54.611	2.106%	5.403%
4.0	4371.891	33.443	88.054	2.684%	8.711%
5.0	4090.219	39.093	127.147	3.137%	12.579%
6.0	3775.359	43.276	170.423	3.473%	16.860%
7.0	3433.711	45.889	216.312	3.683%	21.400%
8.0	3089.813	47.156	263.468	3.785%	26.066%
9.0	2753.297	47.232	310.7	3.791%	30.738%
10.0	2415.938	46.005	356.705	3.692%	35.290%
11.0	2080.828	43.540	400.245	3.494%	39.597%
12.0	1768.570	40.323	440.568	3.236%	43.587%
13.0	1439.859	35.519	476.087	2.851%	47.101%
14.0	1165.929	30.931	507.019	2.482%	50.161%
15.0	991.097	28.130	535.148	2.258%	52.944%
16.0	841.191	25.426	560.575	2.041%	55.459%
17.0	728.789	23.366	583.941	1.875%	57.771%
18.0	655.116	22.200	606.141	1.782%	59.967%
19.0	600.321	21.433	627.573	1.720%	62.087%
20.0	546.877	20.511	648.085	1.646%	64.117%
21.0	503.937	19.804	667.889	1.589%	66.076%
22.0	470.250	19.318	687.207	1.550%	67.987%
23.0	437.252	18.735	705.942	1.504%	69.841%
24.0	409.718	18.275	724.217	1.467%	71.649%
25.0	384.441	17.817	742.034	1.430%	73.411%
26.0	359.459	17.280	759.313	1.387%	75.121%
27.0	332.044	16.531	775.844	1.327%	76.756%
28.0	305.655	15.736	791.58	1.263%	78.313%
29.0	281.883	14.986	806.566	1.203%	79.796%
30.0	255.902	14.031	820.598	1.126%	81.184%
31.0	228.544	12.908	833.506	1.036%	82.461%
32.0	206.269	11.987	845.492	.962%	83.647%
33.0	187.692	11.210	856.702	.900%	84.756%
34.0	171.401	10.511	867.213	.844%	85.796%
35.0	156.375	9.836	877.049	.789%	86.769%
36.0	142.713	9.199	886.248	.738%	87.679%
37.0	130.795	8.632	894.879	.693%	88.533%

$\gamma(^{\circ})$	Average I(cd)	Zonal F(lm)	Sum F(lm)	Eff Flux(%)	Eff Sum(%)
38.0	118.357	7.991	902.87	.641%	89.323%
39.0	105.813	7.302	910.173	.586%	90.046%
40.0	95.871	6.758	916.93	.542%	90.714%
41.0	86.730	6.240	923.17	.501%	91.332%
42.0	78.026	5.725	928.895	.459%	91.898%
43.0	70.692	5.287	934.182	.424%	92.421%
44.0	64.062	4.880	939.062	.392%	92.904%
45.0	57.431	4.453	943.516	.357%	93.344%
46.0	51.996	4.102	947.617	.329%	93.750%
47.0	46.962	3.766	951.384	.302%	94.123%
48.0	42.954	3.500	954.884	.281%	94.469%
49.0	39.853	3.298	958.183	.265%	94.795%
50.0	36.984	3.107	961.289	.249%	95.103%
51.0	34.573	2.946	964.236	.236%	95.394%
52.0	32.309	2.792	967.028	.224%	95.671%
53.0	29.862	2.615	969.643	.210%	95.929%
54.0	27.598	2.448	972.091	.197%	96.172%
55.0	25.636	2.303	974.394	.185%	96.399%
56.0	23.470	2.134	976.528	.171%	96.610%
57.0	20.440	1.880	978.408	.151%	96.796%
58.0	16.699	1.553	979.961	.125%	96.950%
59.0	13.113	1.233	981.193	.099%	97.072%
60.0	10.680	1.014	982.208	.081%	97.172%
61.0	9.619	0.923	983.13	.074%	97.264%
62.0	9.338	0.904	984.034	.073%	97.353%
63.0	9.246	0.903	984.938	.073%	97.442%
64.0	9.232	0.910	985.848	.073%	97.532%
65.0	9.253	0.920	986.767	.074%	97.623%
66.0	9.295	0.931	987.699	.075%	97.716%
67.0	9.338	0.943	988.641	.076%	97.809%
68.0	9.366	0.952	989.593	.076%	97.903%
69.0	9.387	0.961	990.554	.077%	97.998%
70.0	9.415	0.970	991.525	.078%	98.094%
71.0	9.499	0.985	992.51	.079%	98.192%
72.0	9.731	1.015	993.524	.081%	98.292%
73.0	10.174	1.067	994.591	.086%	98.397%
74.0	10.751	1.133	995.725	.091%	98.510%
75.0	11.313	1.198	996.923	.096%	98.628%

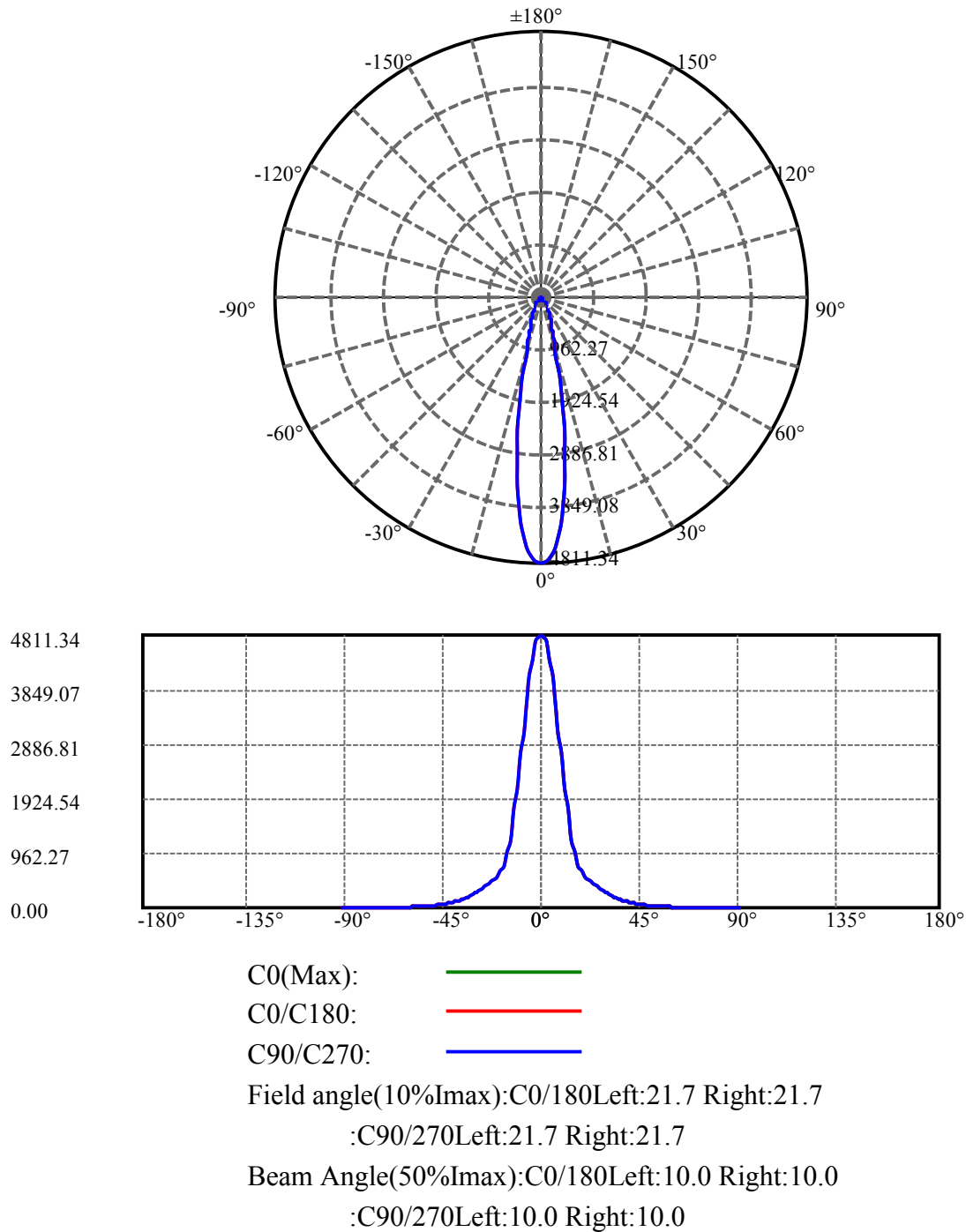
$\gamma(^{\circ})$	Average I(cd)	Zonal F(lm)	Sum F(lm)	Eff Flux(%)	Eff Sum(%)
76.0	11.707	1.246	998.169	.100%	98.751%
77.0	11.939	1.276	999.444	.102%	98.878%
78.0	11.609	1.245	1000.69	.100%	99.001%
79.0	11.081	1.193	1001.882	.096%	99.119%
80.0	10.526	1.137	1003.019	.091%	99.231%
81.0	10.392	1.126	1004.145	.090%	99.343%
82.0	10.273	1.116	1005.26	.090%	99.453%
83.0	10.153	1.105	1006.365	.089%	99.562%
84.0	10.041	1.095	1007.46	.088%	99.671%
85.0	9.837	1.075	1008.535	.086%	99.777%
86.0	5.850	0.640	1009.175	.051%	99.840%
87.0	4.352	0.477	1009.652	.038%	99.887%
88.0	4.191	0.459	1010.111	.037%	99.933%
89.0	4.141	0.454	1010.565	.036%	99.978%
90.0	4.092	0.224	1010.789	.018%	100.000%

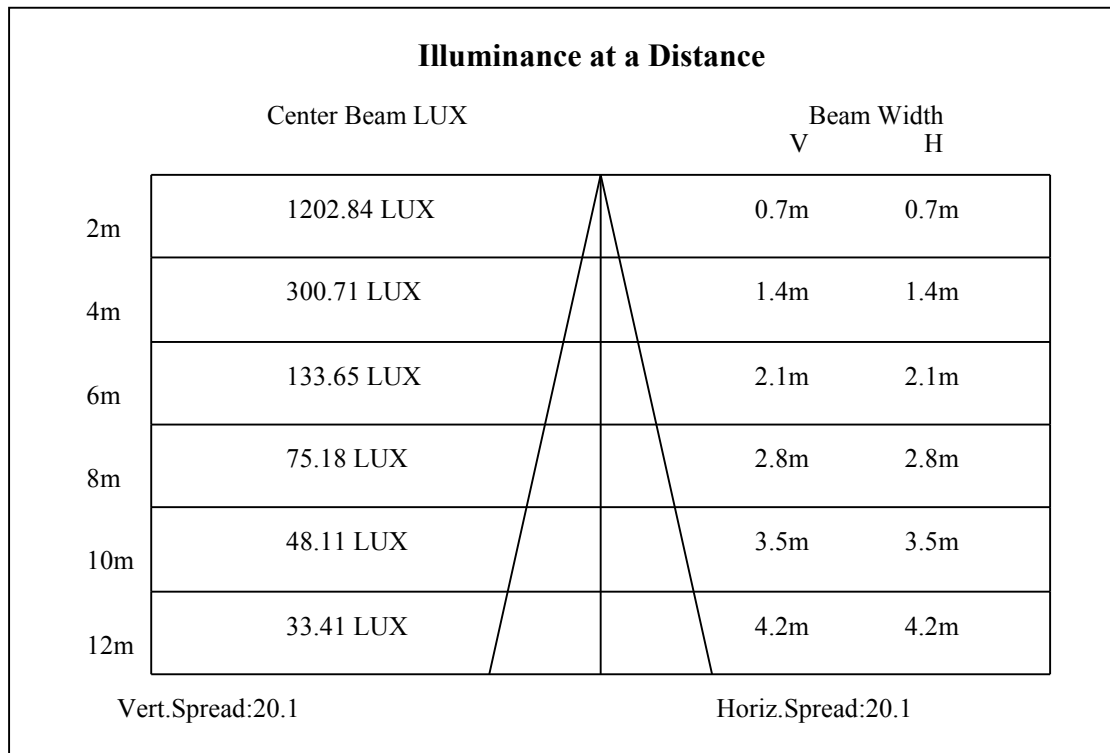
ZONAL LUMEN SUMMARY

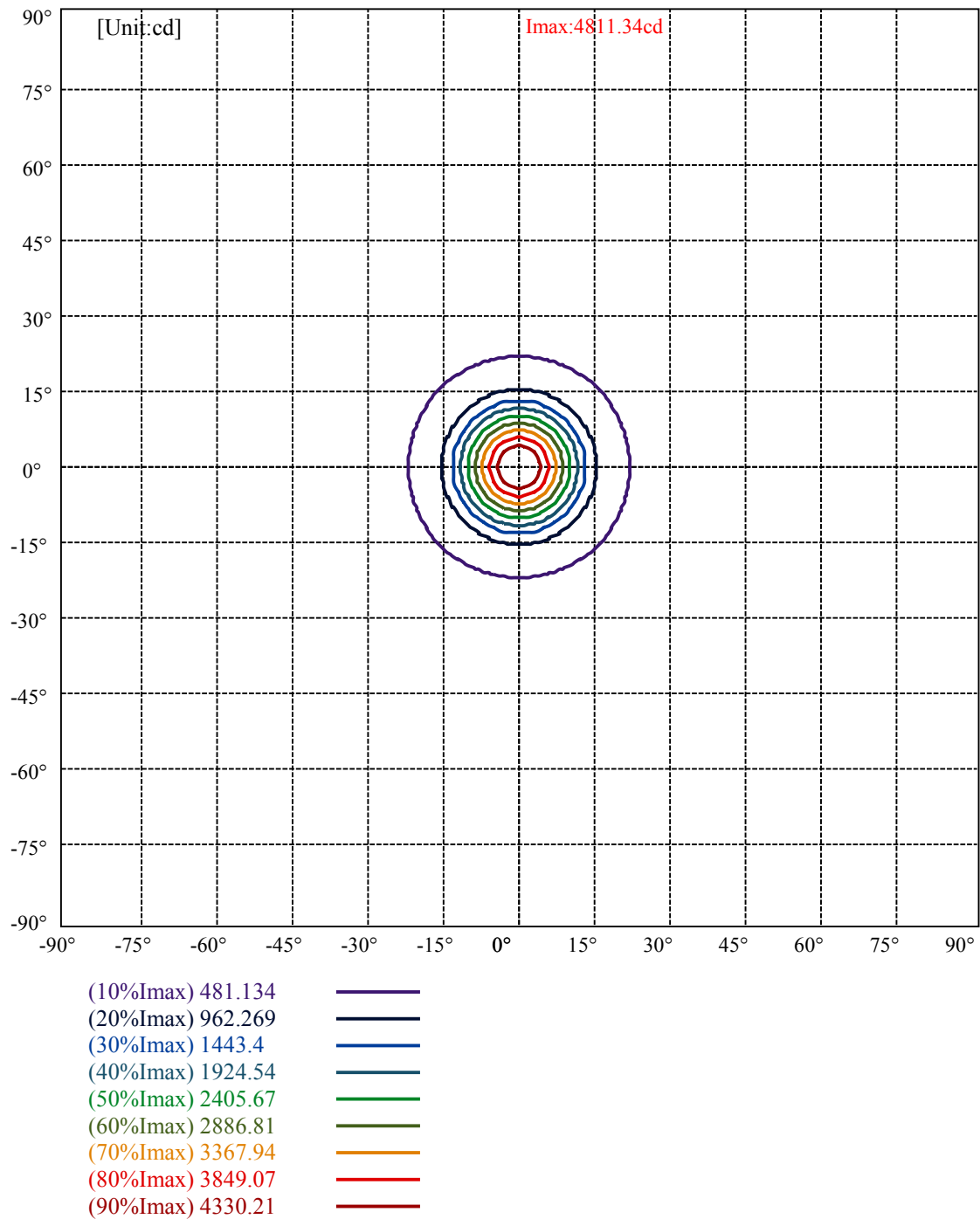
Zone	Lumens	%Lamp	%Fixt
0-30	820.60	65.86%	81.18%
0-40	916.93	73.59%	90.71%
0-60	982.21	78.83%	97.17%
0-90	1010.56	81.10%	99.98%
0-120	1010.56	81.10%	99.98%
0-180	1010.79	81.12%	100.00%
60-90	29.37	2.36%	2.91%
90-120	0.00	0.00%	0.00%
90-130	0.00	0.00%	0.00%
90-150	0.00	0.00%	0.00%
90-180	0.00	0.00%	0.00%
0-29.15	808.63	64.90%	80.00%

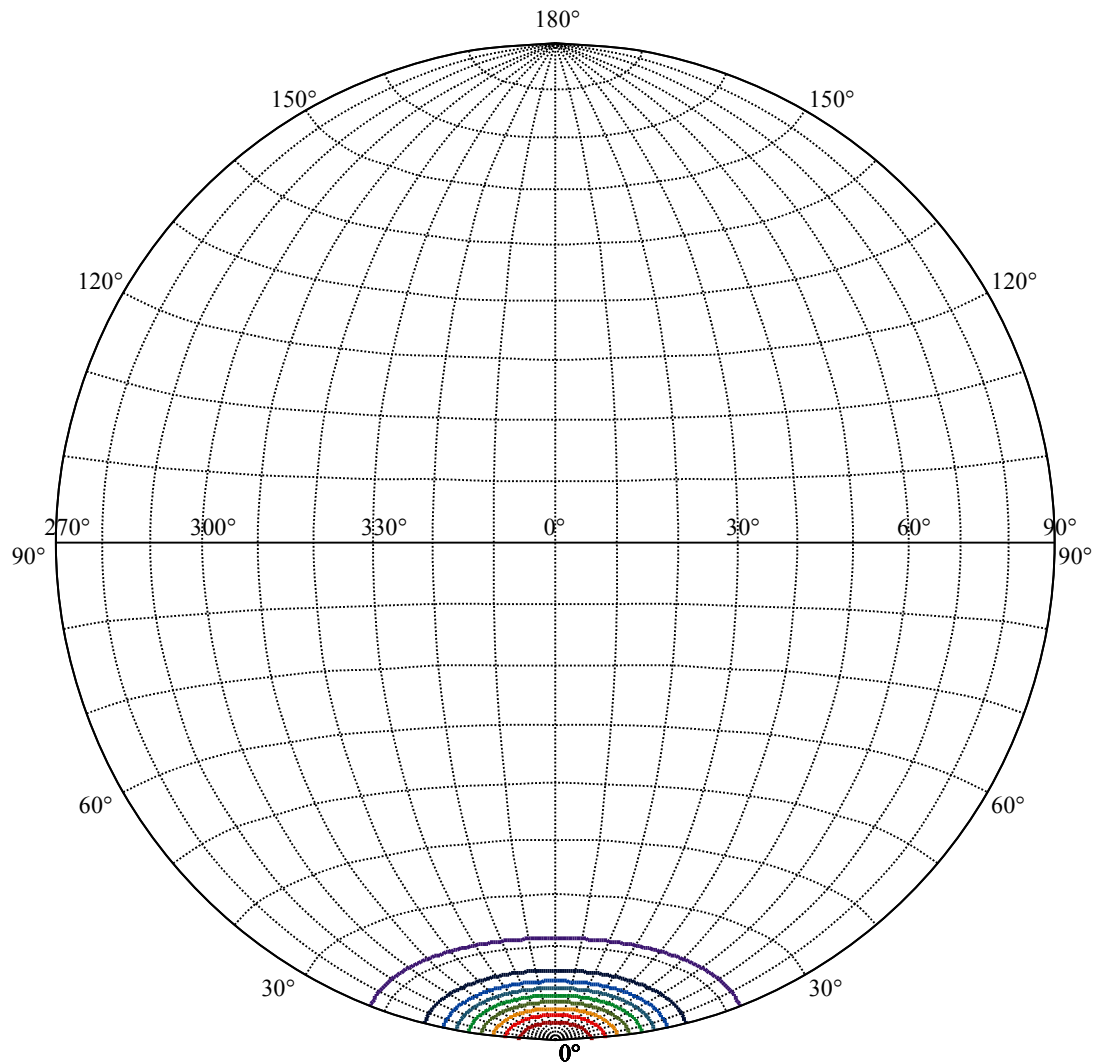
ZONAL LUMEN SUMMARY

0-10	356.71
10-20	291.38
20-30	172.51
30-40	96.33
40-50	44.36
50-60	20.92
60-70	9.32
70-80	11.49
80-90	7.55
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









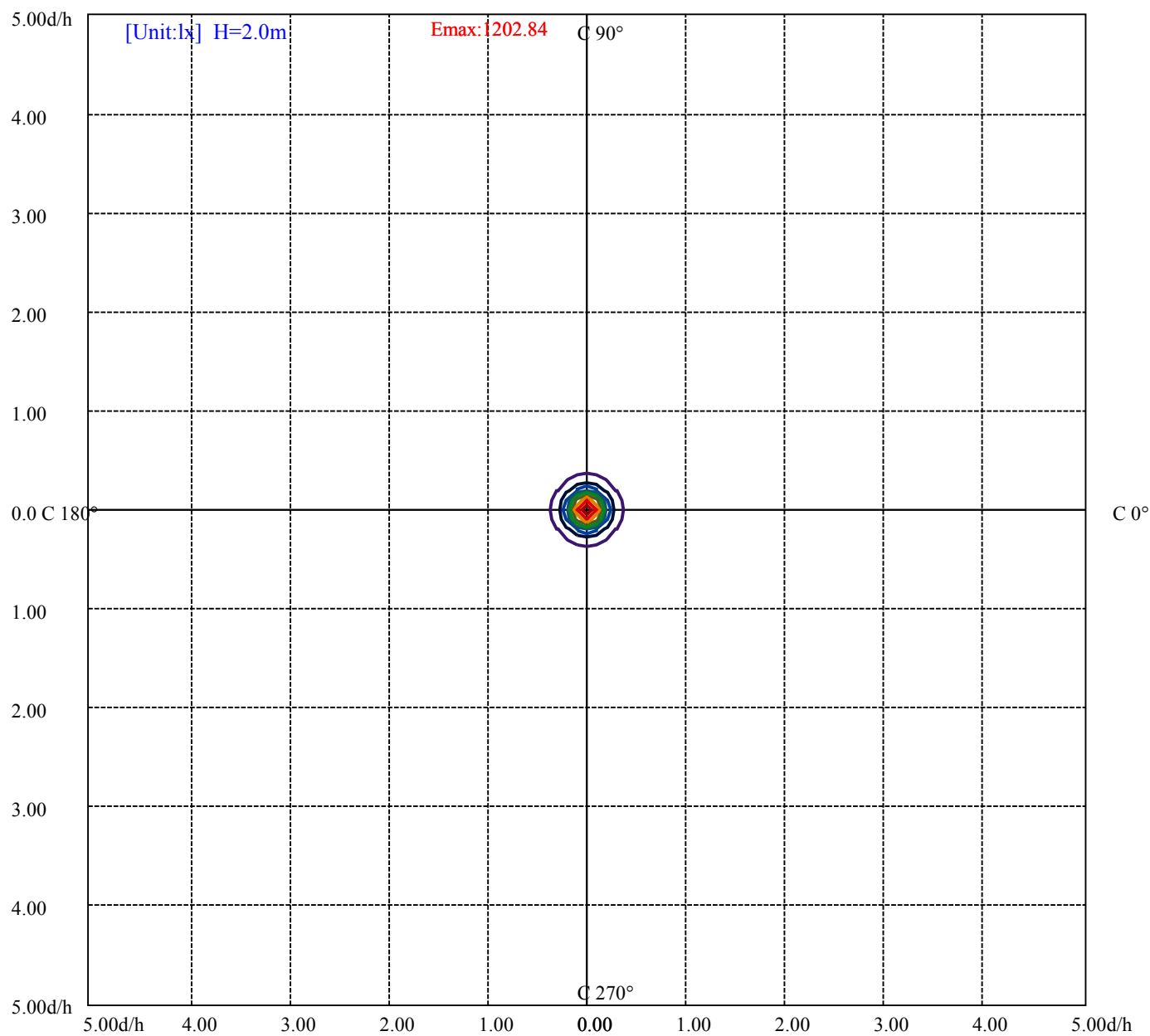
House

[Unit:cd]

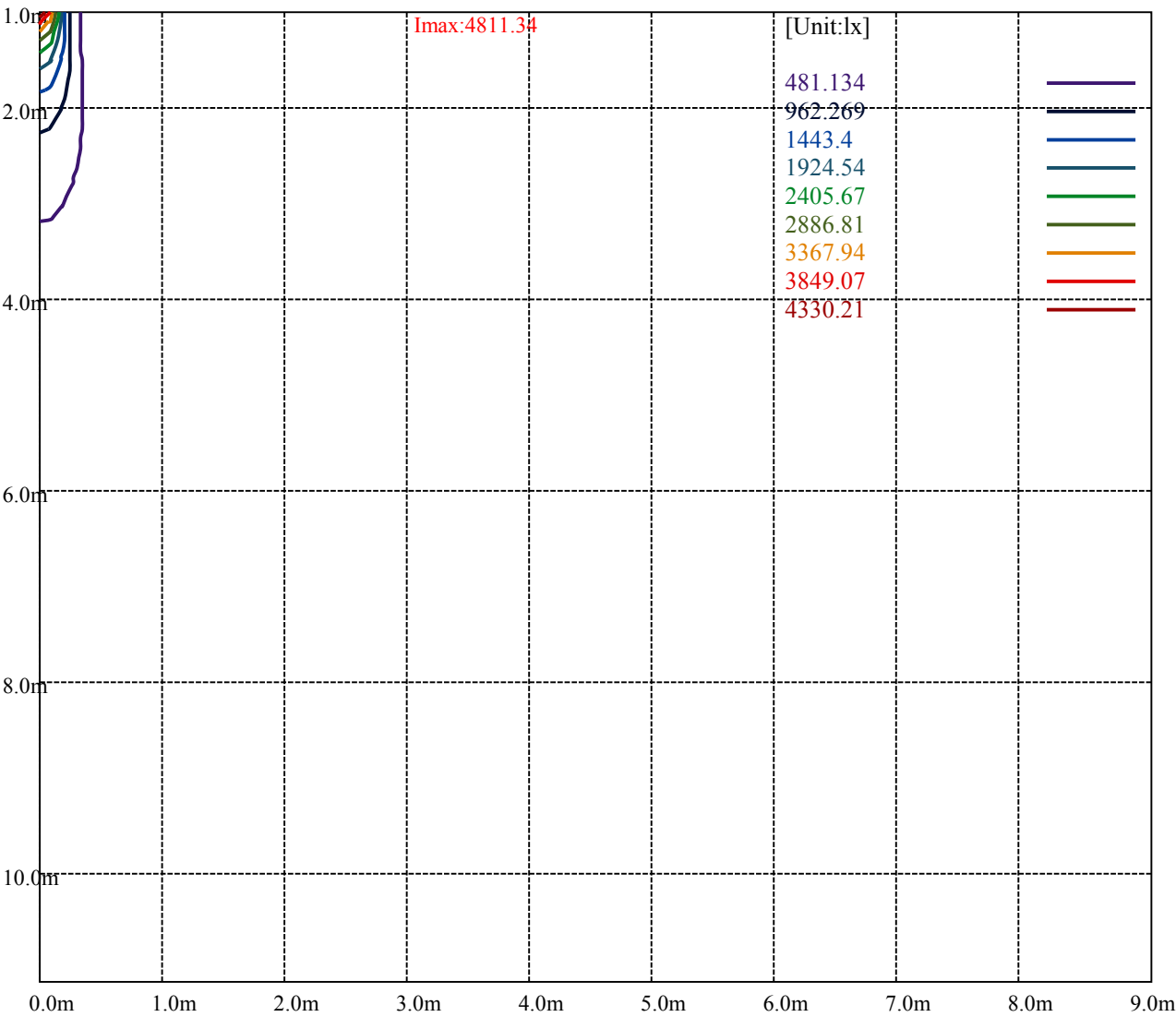
Road

Imax:4811.34

(10%Imax)	481.134	—
(20%Imax)	962.269	—
(30%Imax)	1443.4	—
(40%Imax)	1924.54	—
(50%Imax)	2405.67	—
(60%Imax)	2886.81	—
(70%Imax)	3367.94	—
(80%Imax)	3849.07	—
(90%Imax)	4330.21	—



(10%E _{max}) 120.2835	—
(20%E _{max}) 240.567	—
(30%E _{max}) 360.85	—
(40%E _{max}) 481.135	—
(50%E _{max}) 601.4175	—
(60%E _{max}) 721.7	—
(70%E _{max}) 841.985	—
(80%E _{max}) 962.2675	—
(90%E _{max}) 1082.552	—



Luminance Table

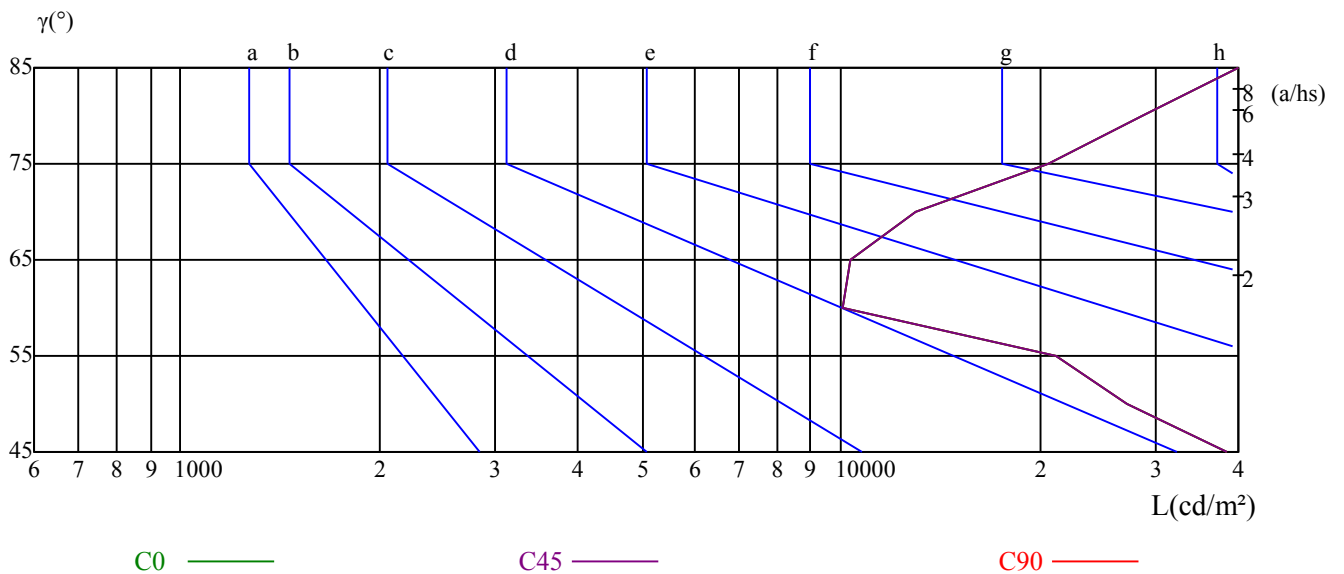
γ	45	50	55	60	65	70	75	80	85
C0	38384	27192	21122	10095	10347	13009	20657	28646	53338
C45	38384	27192	21122	10095	10347	13009	20657	28646	53338
C90	38384	27192	21122	10095	10347	13009	20657	28646	53338

L(Hor)(65)	L(Ver)(65)	L45(65)	L(Hor)(75)	L(Ver)(75)	L45(75)	L(Hor)(85)	L(Ver)(85)	L45(85)
10347	10347	10347	20657	20657	20657	53338	53338	53338

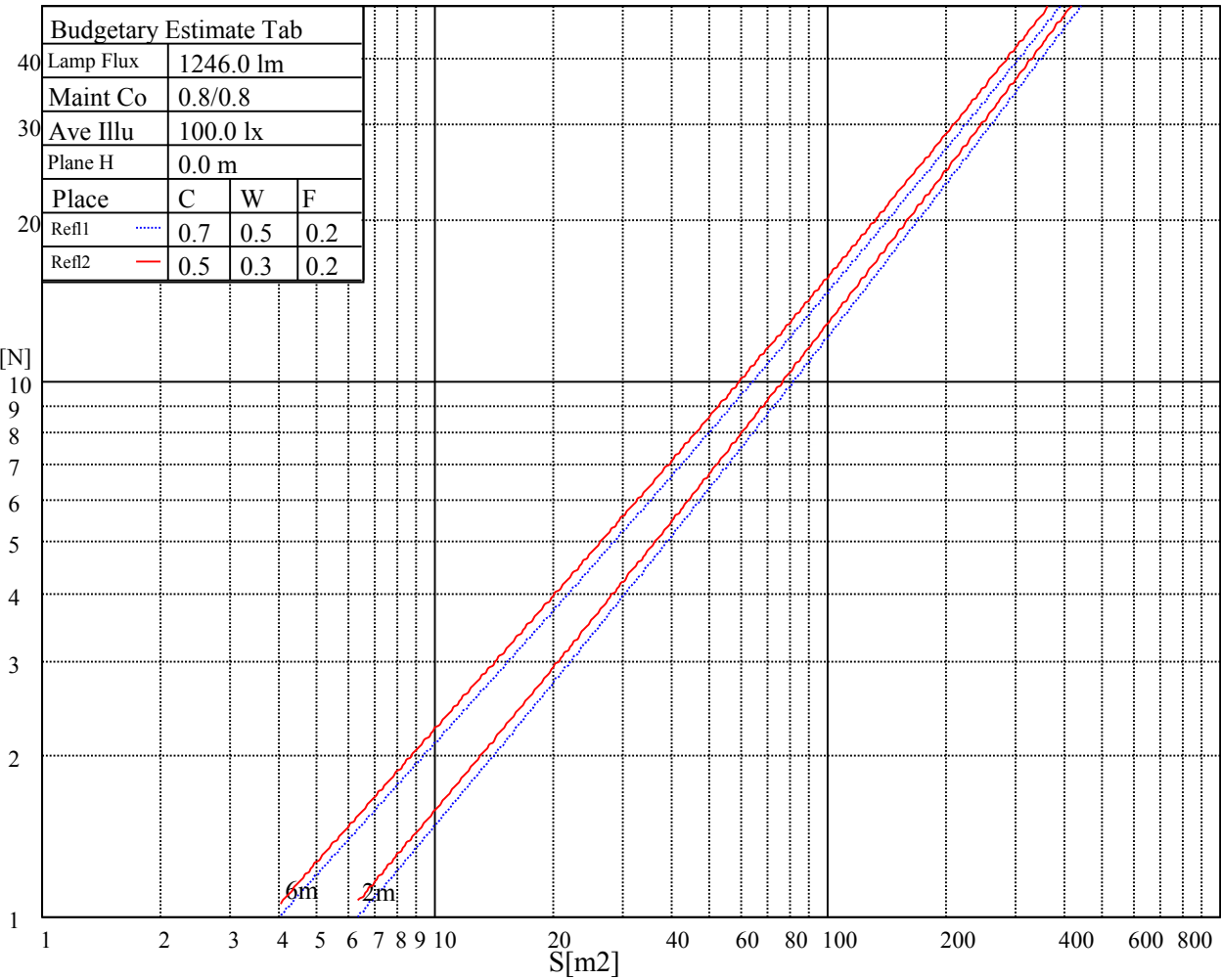
Glare Table

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

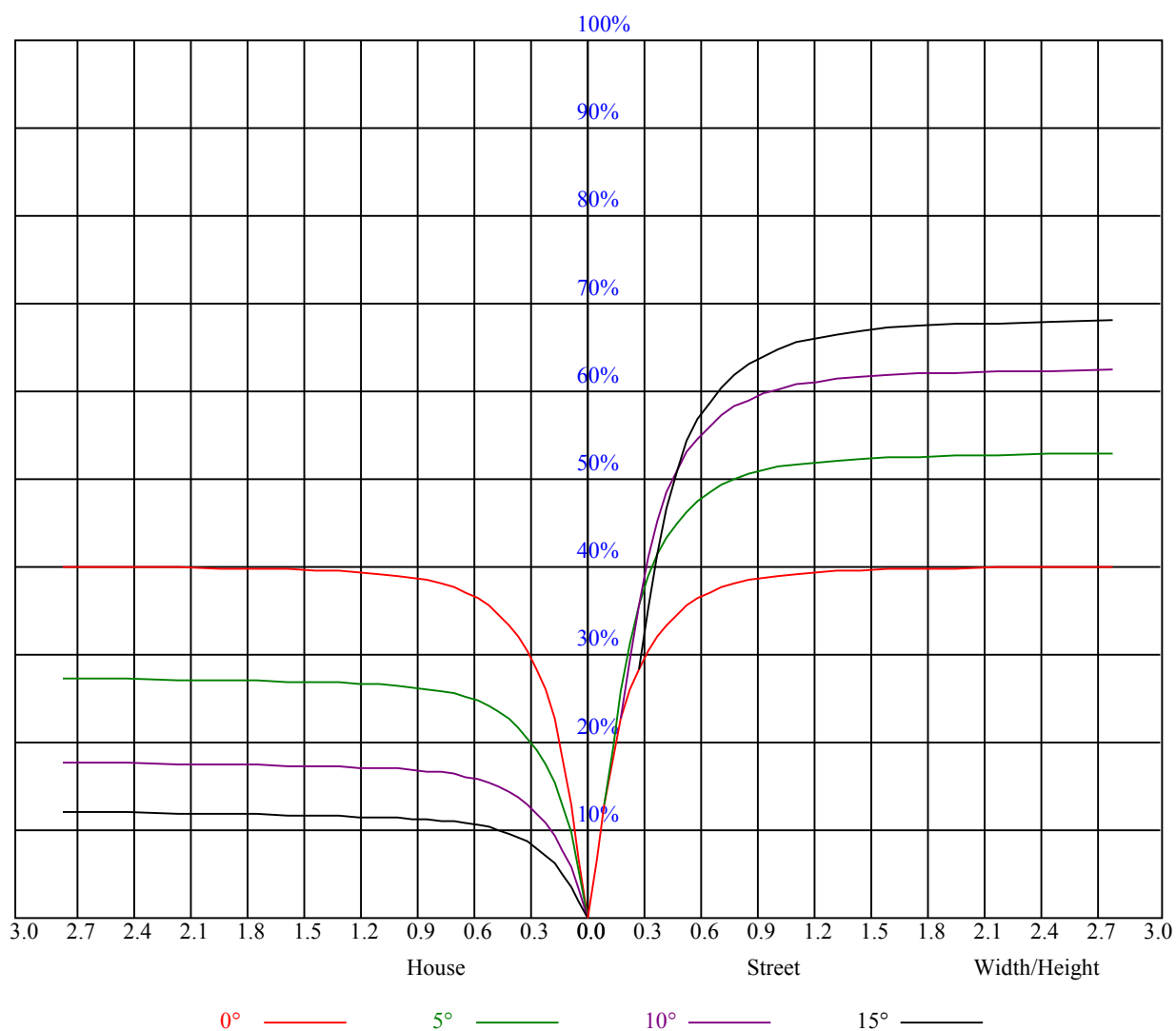
Luminance Limiting Curve



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	14.62	15.64	14.99	15.96	16.27	14.63	15.65	14.99	15.96	16.28
	3H	15.95	16.85	16.33	17.19	17.55	15.98	16.89	16.37	17.22	17.59
	4H	17.67	18.51	18.08	18.86	19.25	17.25	18.09	17.65	18.44	18.83
	6H	19.42	20.19	19.83	20.56	20.96	18.93	19.70	19.35	20.07	20.47
	8H	20.30	21.03	20.74	21.42	21.83	19.89	20.61	20.32	21.00	21.41
	12H	21.78	22.48	22.22	22.86	23.29	21.44	22.14	21.88	22.52	22.95
4H	2H	14.74	15.58	15.15	15.94	16.33	14.75	15.59	15.16	15.94	16.33
	3H	16.61	17.30	17.02	17.71	18.11	16.61	17.30	17.03	17.71	18.12
	4H	18.72	19.33	19.15	19.76	20.21	18.26	18.88	18.70	19.31	19.75
	6H	20.43	20.97	20.90	21.42	21.89	19.95	20.48	20.42	20.93	21.41
	8H	21.53	22.03	22.01	22.48	22.96	21.14	21.63	21.61	22.08	22.56
	12H	23.05	23.49	23.54	23.97	24.45	22.73	23.16	23.22	23.65	24.13
8H	4H	19.35	19.85	19.83	20.30	20.78	19.00	19.50	19.47	19.95	20.42
	6H	21.41	21.81	21.92	22.32	22.80	21.05	21.45	21.56	21.96	22.44
	8H	22.70	23.05	23.23	23.58	24.07	22.40	22.76	22.93	23.28	23.78
	12H	24.33	24.64	24.85	25.14	25.72	24.08	24.39	24.60	24.89	25.47
12H	4H	19.53	19.96	20.02	20.45	20.93	19.21	19.64	19.70	20.13	20.60
	6H	22.04	22.07	22.25	22.54	23.09	21.72	21.75	21.93	22.22	22.77
	8H	23.12	23.43	23.64	23.93	24.51	22.86	23.18	23.39	23.67	24.25
Variation with the observer position at spacings:											
S = 1.0H		1.9/-1.9					1.9/-1.9				
S = 1.5H		2.5/-1.7					2.5/-1.7				
S = 2.0H		3.1/-1.5					3.1/-1.5				
Standard tables:		BKBF					BKBF				
Uncorrected UGR		7.2					7.2				



RHOC	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	0.97	0.97	0.97	0.94	0.94	0.94	0.90	0.90	0.90	0.86	0.86	0.86	0.83	0.83	0.83	0.81
1	0.90	0.88	0.87	0.89	0.87	0.85	0.85	0.84	0.83	0.82	0.81	0.80	0.80	0.79	0.78	0.76
2	0.85	0.82	0.80	0.84	0.81	0.79	0.81	0.79	0.77	0.79	0.77	0.75	0.77	0.75	0.74	0.73
3	0.81	0.77	0.74	0.79	0.76	0.74	0.77	0.75	0.72	0.76	0.73	0.71	0.74	0.72	0.70	0.69
4	0.77	0.73	0.70	0.76	0.72	0.70	0.74	0.71	0.69	0.73	0.70	0.68	0.71	0.69	0.67	0.66
5	0.73	0.69	0.66	0.73	0.69	0.66	0.71	0.68	0.66	0.70	0.67	0.65	0.69	0.66	0.64	0.63
6	0.70	0.66	0.63	0.70	0.66	0.63	0.68	0.65	0.63	0.67	0.65	0.62	0.66	0.64	0.62	0.61
7	0.67	0.64	0.61	0.67	0.63	0.61	0.66	0.63	0.60	0.65	0.62	0.60	0.64	0.62	0.60	0.59
8	0.65	0.61	0.58	0.65	0.61	0.58	0.64	0.60	0.58	0.63	0.60	0.58	0.62	0.60	0.58	0.57
9	0.63	0.59	0.56	0.62	0.59	0.56	0.62	0.58	0.56	0.61	0.58	0.56	0.61	0.58	0.56	0.55
10	0.61	0.57	0.55	0.61	0.57	0.55	0.60	0.57	0.54	0.59	0.56	0.54	0.59	0.56	0.54	0.53



NATA 1676-A

Intensity data(cd)									Appendix Page: 17 Total:19
C/ γ (°)	0.0	1.0	2.0	3.0	4.0	5.0	6.0	7.0	8.0
0.0	4800.94	4782.94	4676.06	4530.38	4322.25	4024.69	3681.00	3359.81	2999.81
45.0	4831.88	4786.31	4686.75	4482.56	4248.56	3972.38	3588.75	3269.25	2952.00
90.0	4809.38	4761.00	4660.31	4470.19	4228.88	3917.25	3610.69	3251.25	2896.31
135.0	4803.19	4800.38	4741.31	4628.25	4457.81	4157.44	3871.13	3560.06	3209.06
180.0	4800.94	4786.88	4712.06	4585.50	4394.81	4078.13	3778.88	3458.25	3058.31
225.0	4831.88	4834.69	4809.38	4710.94	4514.06	4309.88	4029.75	3602.81	3322.13
270.0	4809.38	4812.75	4780.69	4685.06	4539.38	4298.06	3990.94	3677.63	3354.75
315.0	4803.19	4764.94	4660.31	4487.06	4269.38	3963.94	3651.75	3290.63	2926.13
360.0	4800.94	4782.94	4676.06	4530.38	4322.25	4024.69	3681.00	3359.81	2999.81
C/ γ (°)	9.0	10.0	11.0	12.0	13.0	14.0	15.0	16.0	17.0
0.0	2647.69	2334.38	1983.94	1680.19	1373.63	1121.06	947.25	819.00	712.13
45.0	2565.00	2248.31	1931.06	1589.63	1290.94	1078.88	897.75	772.88	695.81
90.0	2585.25	2238.19	1888.31	1590.19	1240.88	1058.91	900.39	785.14	694.74
135.0	2864.25	2559.94	2214.56	1901.81	1565.44	1274.06	1067.06	885.38	759.38
180.0	2782.69	2434.50	2055.38	1787.63	1467.00	1115.61	998.27	850.28	721.24
225.0	3009.94	2595.38	2323.69	2007.00	1693.13	1257.19	1119.09	936.28	788.23
270.0	2959.31	2655.56	2343.38	1986.75	1638.56	1361.81	1101.94	902.81	781.31
315.0	2612.25	2261.25	1906.31	1605.38	1249.31	1059.92	897.02	777.77	677.48
360.0	2647.69	2334.38	1983.94	1680.19	1373.63	1121.06	947.25	819.00	712.13
C/ γ (°)	18.0	19.0	20.0	21.0	22.0	23.0	24.0	25.0	26.0
0.0	650.25	598.50	543.94	506.81	474.75	443.25	413.44	387.56	357.75
45.0	627.75	578.25	530.44	488.25	460.13	428.63	402.75	379.69	356.06
90.0	625.61	572.63	521.44	483.08	447.98	419.79	395.72	370.69	345.38
135.0	679.50	618.75	558.00	514.69	480.94	443.81	417.94	393.19	370.69
180.0	651.54	597.54	551.76	503.66	471.32	443.25	410.74	386.33	363.21
225.0	694.52	633.21	576.34	528.24	491.34	454.22	425.76	398.48	374.06
270.0	692.44	633.38	575.44	525.38	484.88	447.19	415.13	391.50	371.25
315.0	619.31	570.32	517.67	481.39	450.68	417.88	396.28	368.10	337.28
360.0	650.25	598.50	543.94	506.81	474.75	443.25	413.44	387.56	357.75
C/ γ (°)	27.0	28.0	29.0	30.0	31.0	32.0	33.0	34.0	35.0
0.0	330.19	299.25	286.31	247.44	225.11	204.19	188.04	172.80	155.59
45.0	323.44	297.56	284.63	240.69	215.72	196.31	177.13	161.27	148.67
90.0	319.89	294.13	260.61	235.41	213.86	190.46	174.21	160.03	145.01
135.0	340.88	315.56	291.94	285.75	237.83	219.38	196.20	177.19	164.42
180.0	335.36	306.68	281.42	255.32	234.51	212.96	193.73	178.54	163.29
225.0	351.73	328.16	298.29	272.98	249.13	221.68	202.84	185.91	168.30
270.0	339.19	313.88	293.06	269.49	232.99	211.73	190.86	172.13	157.73
315.0	315.68	290.03	258.81	240.13	219.21	193.44	178.54	163.35	147.99
360.0	330.19	299.25	286.31	247.44	225.11	204.19	188.04	172.80	155.59
C/ γ (°)	36.0	37.0	38.0	39.0	40.0	41.0	42.0	43.0	44.0
0.0	143.27	131.29	119.42	105.98	96.30	87.69	78.30	71.44	65.14
45.0	135.84	123.30	110.59	98.83	89.38	81.11	72.23	65.42	58.95
90.0	133.93	120.94	108.45	97.93	87.24	78.19	71.21	64.13	57.66
135.0	148.78	137.70	126.06	112.28	102.04	92.48	82.41	75.21	68.63
180.0	149.01	137.36	125.16	111.04	100.69	91.07	81.84	73.63	67.22
225.0	153.11	140.91	126.84	113.40	102.88	92.08	83.53	75.15	67.56
270.0	142.71	130.95	118.18	105.92	96.02	87.30	77.68	70.99	64.80
315.0	135.06	123.92	112.16	101.14	92.42	83.93	77.01	69.58	62.55
360.0	143.27	131.29	119.42	105.98	96.30	87.69	78.30	71.44	65.14

NATA 1676-A

Intensity data(cd)										Appendix Page: 18 Total:19	
C/ γ (°)	45.0	46.0	47.0	48.0	49.0	50.0	51.0	52.0	53.0		
0.0	58.28	52.09	47.31	42.92	39.77	36.17	33.41	30.94	28.18		
45.0	51.69	46.91	42.81	39.32	36.51	34.48	32.46	30.21	28.18		
90.0	52.59	48.21	43.54	40.61	38.31	35.78	33.81	31.61	29.03		
135.0	60.69	55.18	50.34	45.73	42.19	39.60	37.18	34.99	32.29		
180.0	60.36	54.17	49.28	44.83	41.63	38.59	35.78	33.30	30.83		
225.0	61.31	55.41	48.77	44.61	41.23	37.86	35.61	33.53	31.33		
270.0	57.77	52.59	47.93	43.26	39.54	36.90	34.20	32.06	29.48		
315.0	56.76	51.41	45.73	42.36	39.66	36.51	34.14	31.84	29.59		
360.0	58.28	52.09	47.31	42.92	39.77	36.17	33.41	30.94	28.18		
C/ γ (°)	54.0	55.0	56.0	57.0	58.0	59.0	60.0	61.0	62.0		
0.0	26.21	24.41	22.56	19.13	15.47	11.93	9.90	9.39	9.39		
45.0	26.21	24.47	22.05	18.39	14.40	11.59	9.96	9.56	9.28		
90.0	26.72	24.30	21.60	19.07	14.68	11.53	10.01	9.68	9.56		
135.0	29.70	27.62	25.43	21.99	18.68	14.85	11.64	10.01	9.90		
180.0	28.07	26.04	23.96	20.59	17.16	13.39	10.80	9.28	9.23		
225.0	28.97	26.83	24.75	22.56	18.90	14.34	11.08	9.34	8.61		
270.0	27.39	25.54	23.74	21.26	18.23	14.79	11.14	9.68	9.17		
315.0	27.51	25.88	23.68	20.53	16.09	12.49	10.91	10.01	9.56		
360.0	26.21	24.41	22.56	19.13	15.47	11.93	9.90	9.39	9.39		
C/ γ (°)	63.0	64.0	65.0	66.0	67.0	68.0	69.0	70.0	71.0		
0.0	9.45	9.56	9.68	9.73	9.79	9.79	9.79	9.73	9.79		
45.0	9.06	9.00	9.00	9.06	9.17	9.17	9.23	9.34	9.45		
90.0	9.56	9.56	9.62	9.68	9.73	9.84	9.90	9.96	10.24		
135.0	9.84	9.84	9.84	9.90	9.96	9.96	10.01	10.01	10.07		
180.0	9.23	9.28	9.34	9.39	9.39	9.45	9.51	9.51	9.51		
225.0	8.55	8.49	8.55	8.55	8.55	8.61	8.61	8.66	8.72		
270.0	9.00	9.00	8.94	8.94	8.94	9.00	9.00	9.06	9.11		
315.0	9.28	9.11	9.06	9.11	9.17	9.11	9.06	9.06	9.11		
360.0	9.45	9.56	9.68	9.73	9.79	9.79	9.79	9.73	9.79		
C/ γ (°)	72.0	73.0	74.0	75.0	76.0	77.0	78.0	79.0	80.0		
0.0	9.96	10.01	10.13	10.29	10.46	10.52	10.52	10.52	10.58		
45.0	9.62	10.29	11.36	12.88	13.89	14.40	14.01	12.83	11.98		
90.0	11.03	12.54	14.40	15.81	16.43	16.76	15.92	13.89	11.25		
135.0	10.24	10.52	10.91	11.08	11.08	10.86	10.63	10.58	10.52		
180.0	9.56	9.56	9.68	9.79	9.90	9.90	9.90	9.90	9.90		
225.0	8.89	9.45	10.07	10.46	10.69	11.08	11.08	10.52	9.62		
270.0	9.23	9.39	9.56	9.96	10.74	11.36	10.18	9.90	9.84		
315.0	9.34	9.62	9.90	10.24	10.46	10.63	10.63	10.52	10.52		
360.0	9.96	10.01	10.13	10.29	10.46	10.52	10.52	10.52	10.58		
C/ γ (°)	81.0	82.0	83.0	84.0	85.0	86.0	87.0	88.0	89.0		
0.0	10.58	10.46	10.29	10.13	9.96	5.12	4.33	4.22	4.22		
45.0	11.70	11.59	11.48	11.31	10.86	4.67	4.28	4.22	4.11		
90.0	10.29	10.13	10.24	10.29	10.18	5.06	4.28	4.16	4.11		
135.0	10.46	10.35	10.24	10.01	9.84	8.49	4.67	4.16	4.11		
180.0	9.90	9.84	9.62	9.45	9.23	5.34	4.22	4.16	4.16		
225.0	9.56	9.62	9.68	9.62	9.45	7.59	4.39	4.22	4.16		
270.0	10.24	10.01	9.73	9.73	9.62	5.79	4.44	4.22	4.16		
315.0	10.41	10.18	9.96	9.79	9.56	4.73	4.22	4.16	4.11		
360.0	10.58	10.46	10.29	10.13	9.96	5.12	4.33	4.22	4.22		

NATA 1676-A

Intensity data(cd)

Appendix Page: 19 Total:19

C/ $\gamma(^{\circ})$	90.0
0.0	4.05
45.0	4.05
90.0	4.05
135.0	4.11
180.0	4.16
225.0	4.16
270.0	4.11
315.0	4.05
360.0	4.05