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NATA

Client:

LumCAT: 2-2646-L

Luminaire: 92.70.411.00

Report No: 20231023-B006

Ballast type: AC

Test No: 20231023-C006

Voltage(V): 36.590

LampCAT: NICHIA NFDWJ130B-V3

Current(A): 0.576

Lamp flux(lm): 2810.0

Power (W): 21.075

Number of Lamps: 1

PF: 0.000

Length(mm): 0

Width(mm): 0

Phm Type: C

Height(mm): 0

Photometric Results

Lumens(lm): 2549.53, Efficiency(%): 90.73% , Luminous Efficacy(lm/W): 120.97

Central intensity(cd): 4416.802, Maximum intensity(cd): 4416.802

Angle of maximum intensity: C=0.0 γ =0.0

Beam Angle(50%Imax): [C0/180]Total=47.2

[C90/270]Total=47.2

Field angle(10%Imax): [C0/180]Total=67.0

[C90/270]Total=67.0

Maximum s/h(1/2): C0_180=0.75 C90_270=0.75

Maximum s/h(1/4): C0_180=0.72 C90_270=0.72

Up flux rate of lamp(%): 0.00%

Down flux rate of lamp(%): 90.73%

Up flux rate of LUM(%): - -

Down flux rate of LUM(%): 100.00%

CIE Type : Direct lighting

Output flux ratio in π solid angle : 98.007%

$\gamma(^{\circ})$	Average I(cd)	Zonal F(lm)	Sum F(lm)	Eff Flux(%)	Eff Sum(%)
0.0	4416.802	0.000	0	0.00%	0.00%
1.0	4403.656	4.220	4.22	0.15%	0.17%
2.0	4374.387	12.599	16.82	0.45%	0.66%
3.0	4329.205	20.816	37.636	0.74%	1.48%
4.0	4273.990	28.798	66.433	1.02%	2.61%
5.0	4212.132	36.507	102.94	1.30%	4.04%
6.0	4146.192	43.925	146.865	1.56%	5.76%
7.0	4079.076	51.054	197.919	1.82%	7.76%
8.0	4006.424	57.866	255.786	2.06%	10.03%
9.0	3932.112	64.338	320.123	2.29%	12.56%
10.0	3856.139	70.481	390.604	2.51%	15.32%
11.0	3773.801	76.239	466.843	2.71%	18.31%
12.0	3684.958	81.535	548.378	2.90%	21.51%
13.0	3597.638	86.426	634.804	3.08%	24.90%
14.0	3502.845	90.886	725.689	3.23%	28.46%
15.0	3402.724	94.803	820.492	3.37%	32.18%
16.0	3294.785	98.137	918.629	3.49%	36.03%
17.0	3170.585	100.683	1019.313	3.58%	39.98%
18.0	3040.712	102.411	1121.723	3.64%	44.00%
19.0	2899.975	103.356	1225.079	3.68%	48.05%
20.0	2757.786	103.553	1328.632	3.69%	52.11%
21.0	2605.702	102.990	1431.622	3.67%	56.15%
22.0	2442.339	101.443	1533.064	3.61%	60.13%
23.0	2298.005	99.465	1632.529	3.54%	64.03%
24.0	2140.939	97.051	1729.581	3.45%	67.84%
25.0	1971.834	93.515	1823.096	3.33%	71.51%
26.0	1787.368	88.736	1911.833	3.16%	74.99%
27.0	1535.163	81.286	1993.119	2.89%	78.18%
28.0	1334.741	72.660	2065.779	2.59%	81.03%
29.0	1170.078	65.533	2131.312	2.33%	83.60%
30.0	1014.459	58.982	2190.294	2.10%	85.91%
31.0	836.926	51.521	2241.815	1.83%	87.93%
32.0	666.554	43.073	2284.888	1.53%	89.62%
33.0	508.976	34.632	2319.52	1.23%	90.98%
34.0	371.008	26.631	2346.151	0.95%	92.02%
35.0	284.587	20.360	2366.511	0.72%	92.82%
36.0	235.107	16.547	2383.058	0.59%	93.47%
37.0	186.182	13.740	2396.798	0.49%	94.01%

$\gamma(^{\circ})$	Average I(cd)	Zonal F(lm)	Sum F(lm)	Eff Flux(%)	Eff Sum(%)
38.0	134.454	10.702	2407.501	0.38%	94.43%
39.0	114.831	8.509	2416.01	0.30%	94.76%
40.0	100.688	7.517	2423.526	0.27%	95.06%
41.0	88.773	6.747	2430.273	0.24%	95.32%
42.0	78.595	6.081	2436.354	0.22%	95.56%
43.0	70.147	5.510	2441.863	0.20%	95.78%
44.0	63.906	5.060	2446.923	0.18%	95.98%
45.0	58.239	4.694	2451.617	0.17%	96.16%
46.0	53.485	4.369	2455.986	0.16%	96.33%
47.0	49.479	4.095	2460.082	0.15%	96.49%
48.0	45.937	3.857	2463.939	0.14%	96.64%
49.0	42.947	3.650	2467.589	0.13%	96.79%
50.0	40.173	3.466	2471.054	0.12%	96.92%
51.0	37.620	3.291	2474.346	0.12%	97.05%
52.0	35.530	3.139	2477.485	0.11%	97.17%
53.0	33.586	3.007	2480.491	0.11%	97.29%
54.0	31.870	2.885	2483.376	0.10%	97.41%
55.0	30.216	2.771	2486.148	0.10%	97.51%
56.0	28.881	2.670	2488.818	0.10%	97.62%
57.0	27.663	2.585	2491.403	0.09%	97.72%
58.0	26.535	2.506	2493.91	0.09%	97.82%
59.0	25.539	2.434	2496.344	0.09%	97.91%
60.0	24.591	2.368	2498.712	0.08%	98.01%
61.0	23.781	2.308	2501.021	0.08%	98.10%
62.0	22.958	2.252	2503.273	0.08%	98.19%
63.0	22.266	2.199	2505.472	0.08%	98.27%
64.0	21.553	2.150	2507.623	0.08%	98.36%
65.0	20.931	2.102	2509.725	0.07%	98.44%
66.0	20.349	2.060	2511.785	0.07%	98.52%
67.0	19.775	2.018	2513.802	0.07%	98.60%
68.0	19.208	1.975	2515.777	0.07%	98.68%
69.0	18.703	1.934	2517.711	0.07%	98.75%
70.0	18.204	1.895	2519.606	0.07%	98.83%
71.0	17.720	1.857	2521.463	0.07%	98.90%
72.0	17.229	1.817	2523.28	0.06%	98.97%
73.0	16.786	1.779	2525.059	0.06%	99.04%
74.0	16.357	1.742	2526.802	0.06%	99.11%
75.0	15.893	1.704	2528.506	0.06%	99.18%

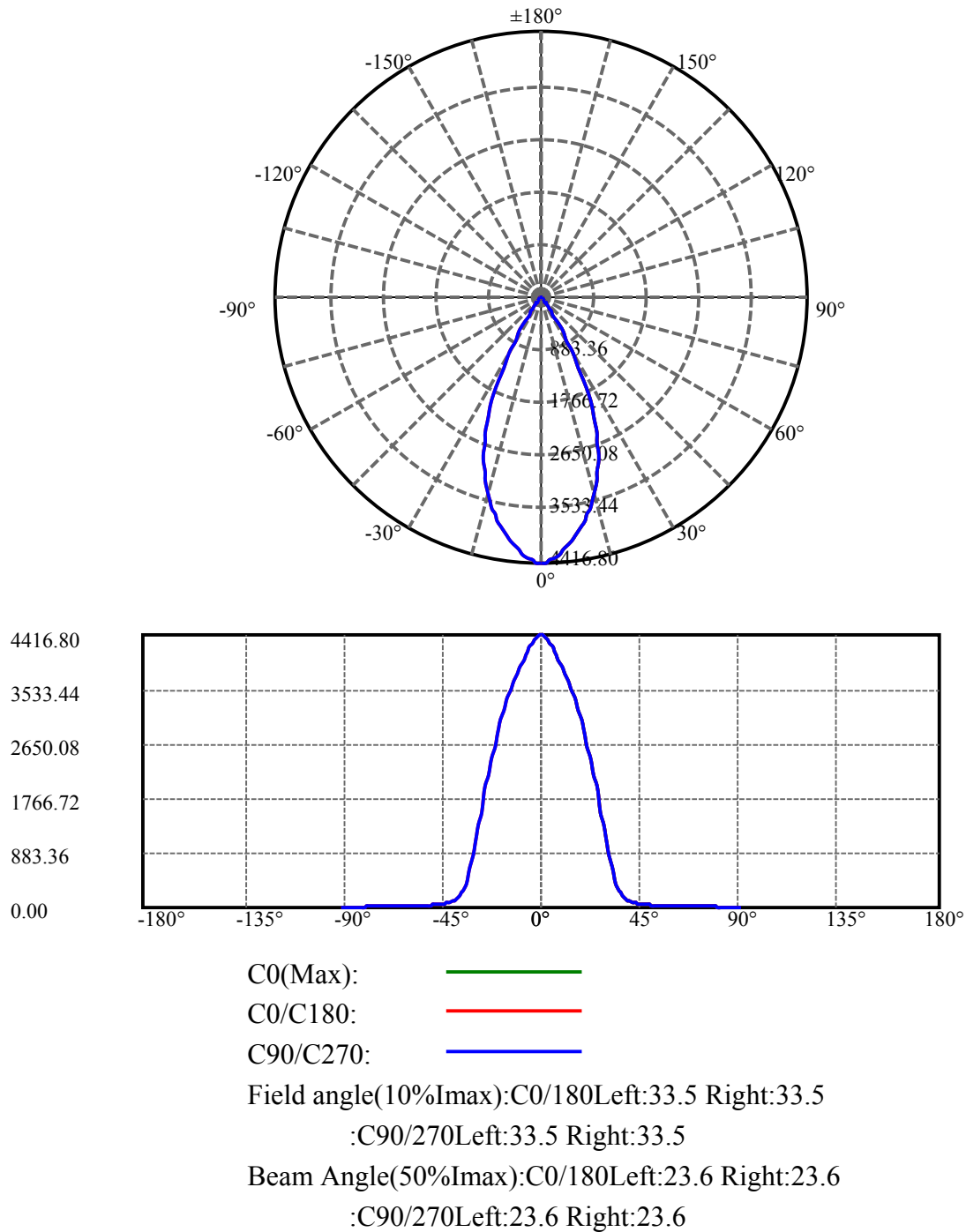
$\gamma(^{\circ})$	Average I(cd)	Zonal F(lm)	Sum F(lm)	Eff Flux(%)	Eff Sum(%)
76.0	15.416	1.662	2530.168	0.06%	99.24%
77.0	15.001	1.622	2531.789	0.06%	99.30%
78.0	14.558	1.582	2533.372	0.06%	99.37%
79.0	14.136	1.542	2534.913	0.05%	99.43%
80.0	13.707	1.501	2536.414	0.05%	99.49%
81.0	13.326	1.462	2537.876	0.05%	99.54%
82.0	12.960	1.425	2539.302	0.05%	99.60%
83.0	12.572	1.388	2540.69	0.05%	99.65%
84.0	12.268	1.353	2542.043	0.05%	99.71%
85.0	11.956	1.322	2543.365	0.05%	99.76%
86.0	11.624	1.289	2544.654	0.05%	99.81%
87.0	11.368	1.258	2545.912	0.04%	99.86%
88.0	11.078	1.230	2547.142	0.04%	99.91%
89.0	10.870	1.203	2548.345	0.04%	99.95%
90.0	10.808	1.189	2549.533	0.04%	100.00%

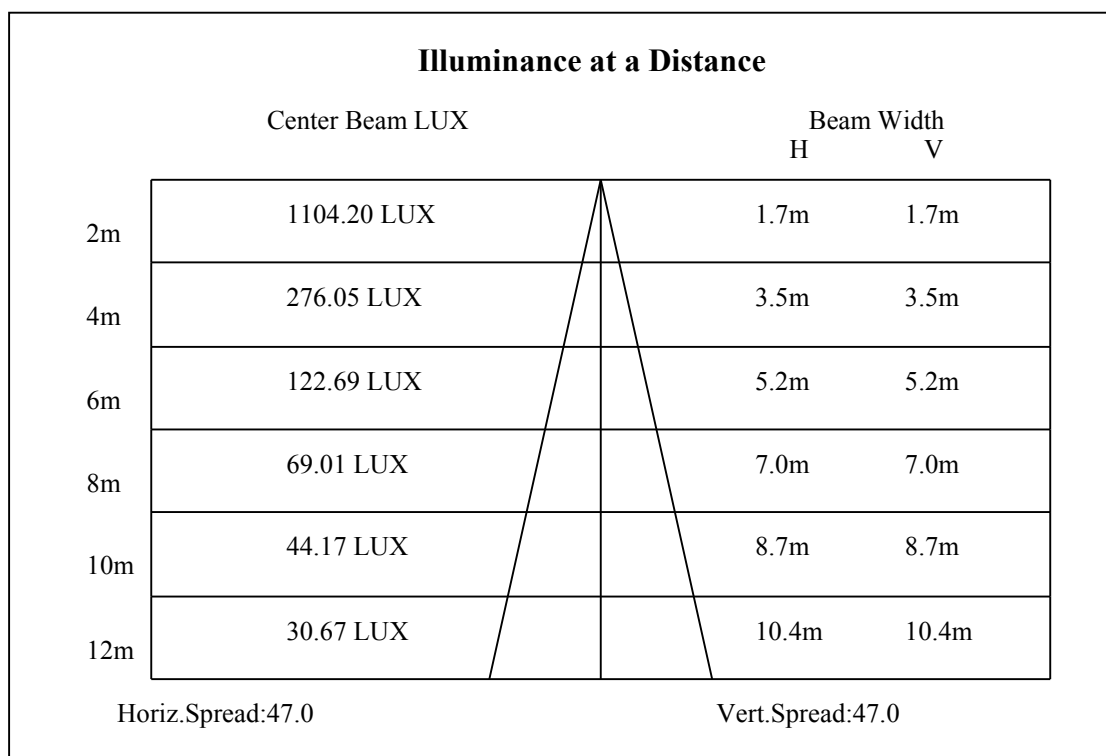
ZONAL LUMEN SUMMARY

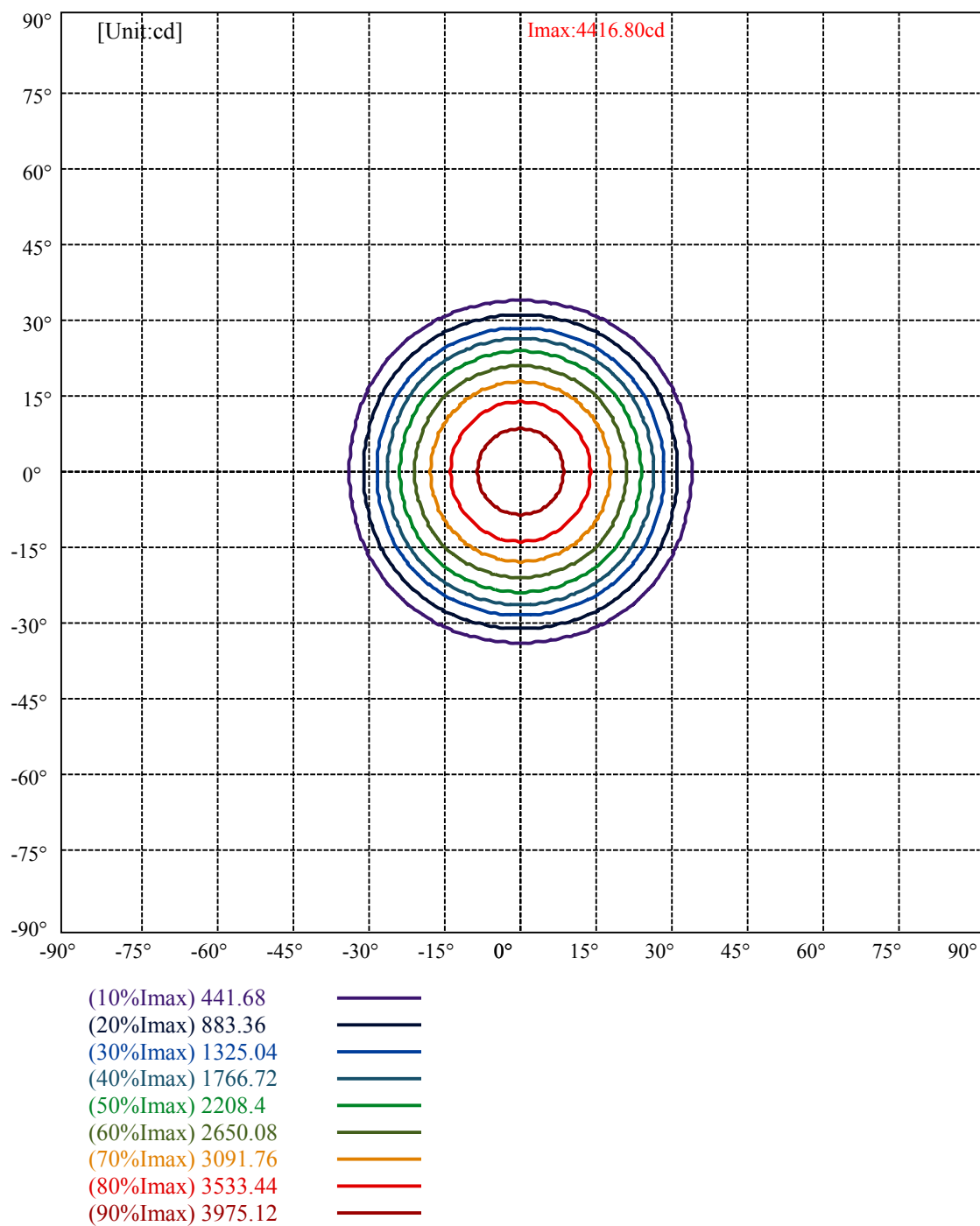
Zone	Lumens	%Lamp	%Fixt
0-30	2190.29	77.95%	85.91%
0-40	2423.53	86.25%	95.06%
0-60	2498.71	88.92%	98.01%
0-90	2548.34	90.69%	99.95%
0-120	2548.34	90.69%	99.95%
0-180	2549.53	90.73%	100.00%
60-90	49.63	1.77%	1.95%
90-120	0.00	0.00%	0.00%
90-130	0.00	0.00%	0.00%
90-150	0.00	0.00%	0.00%
90-180	0.00	0.00%	0.00%
0-27.64	2039.63	72.58%	80.00%

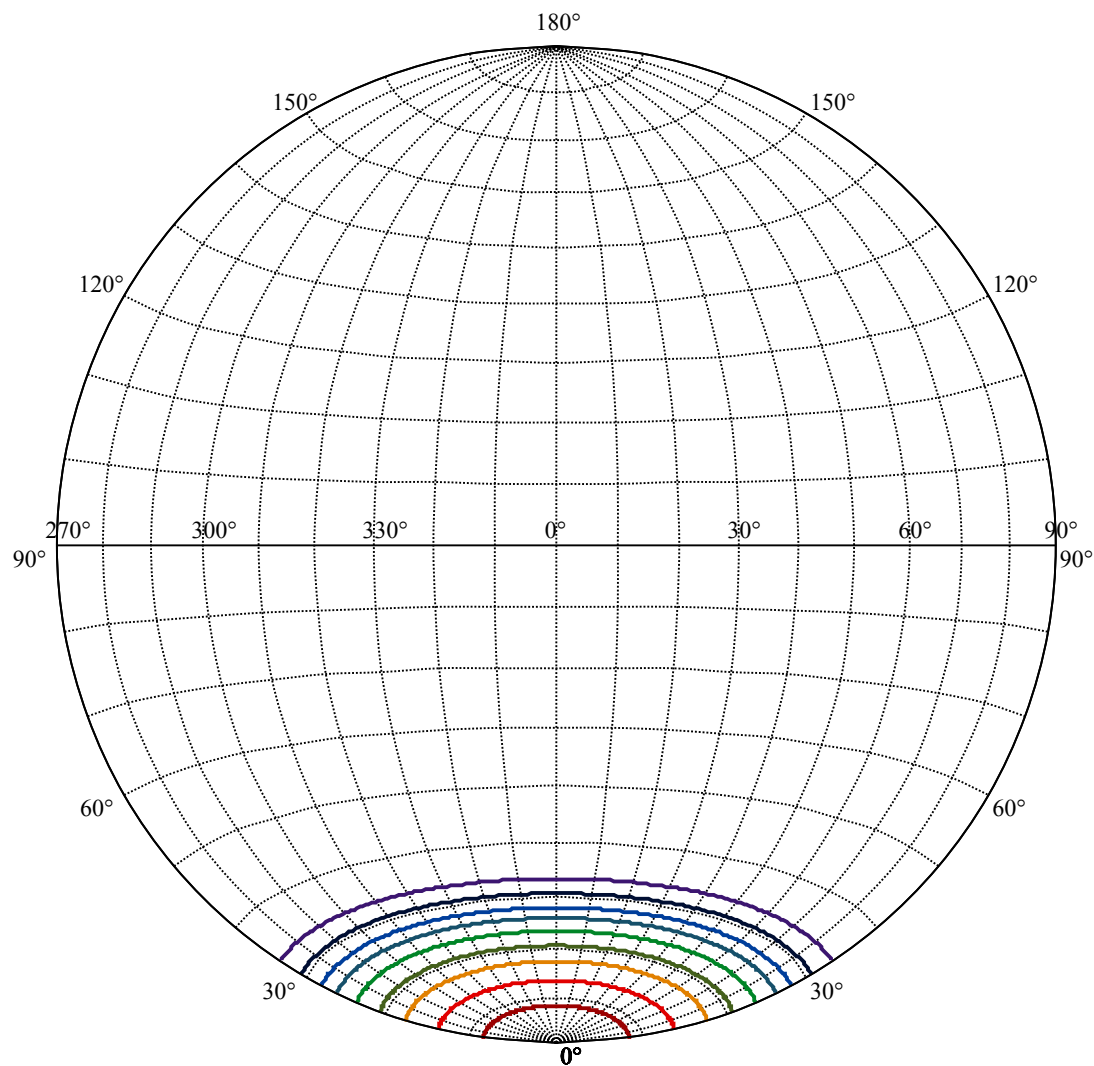
ZONAL LUMEN SUMMARY

0-10	390.60
10-20	938.03
20-30	861.66
30-40	233.23
40-50	47.53
50-60	27.66
60-70	20.89
70-80	16.81
80-90	11.93
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







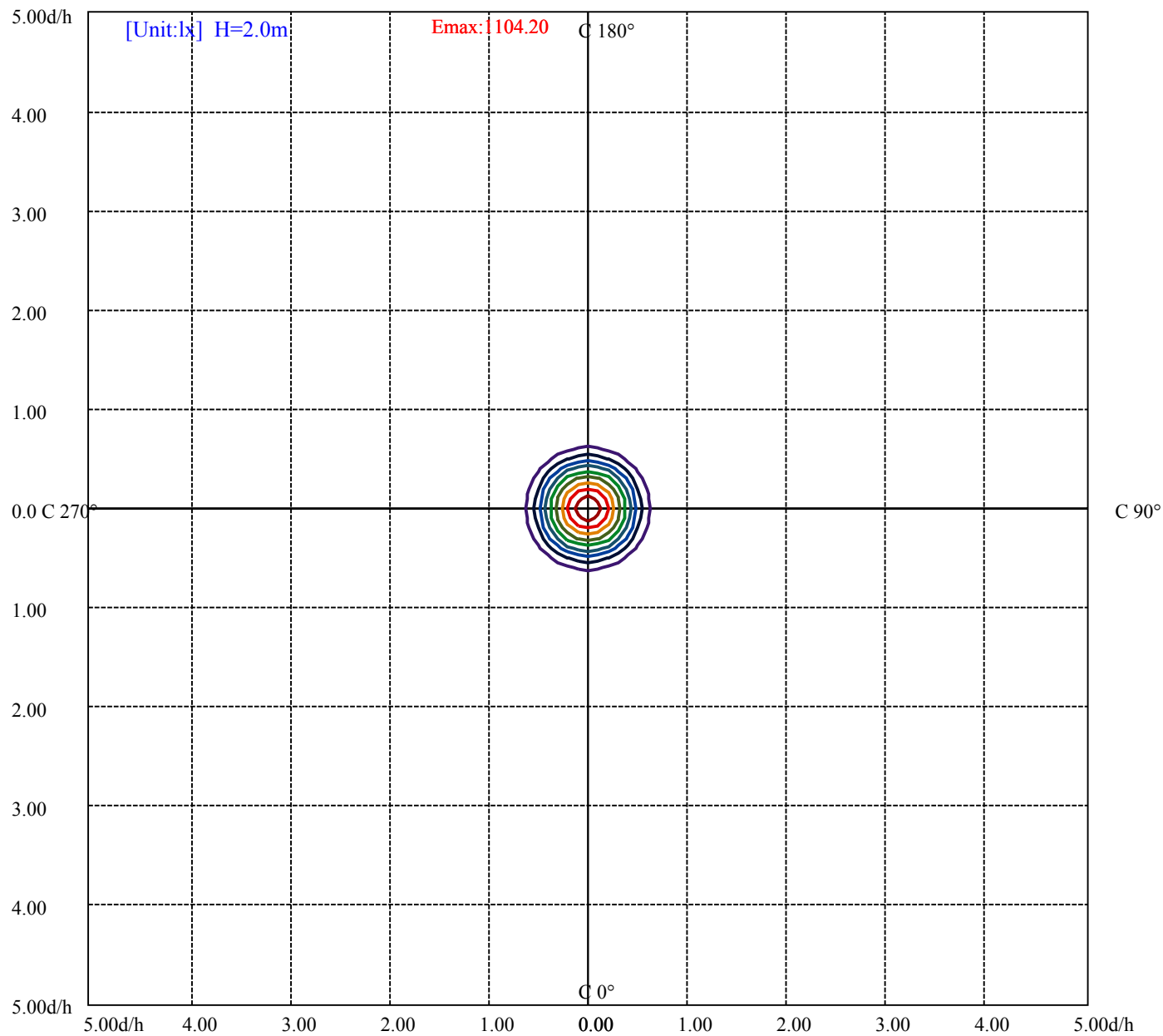


House

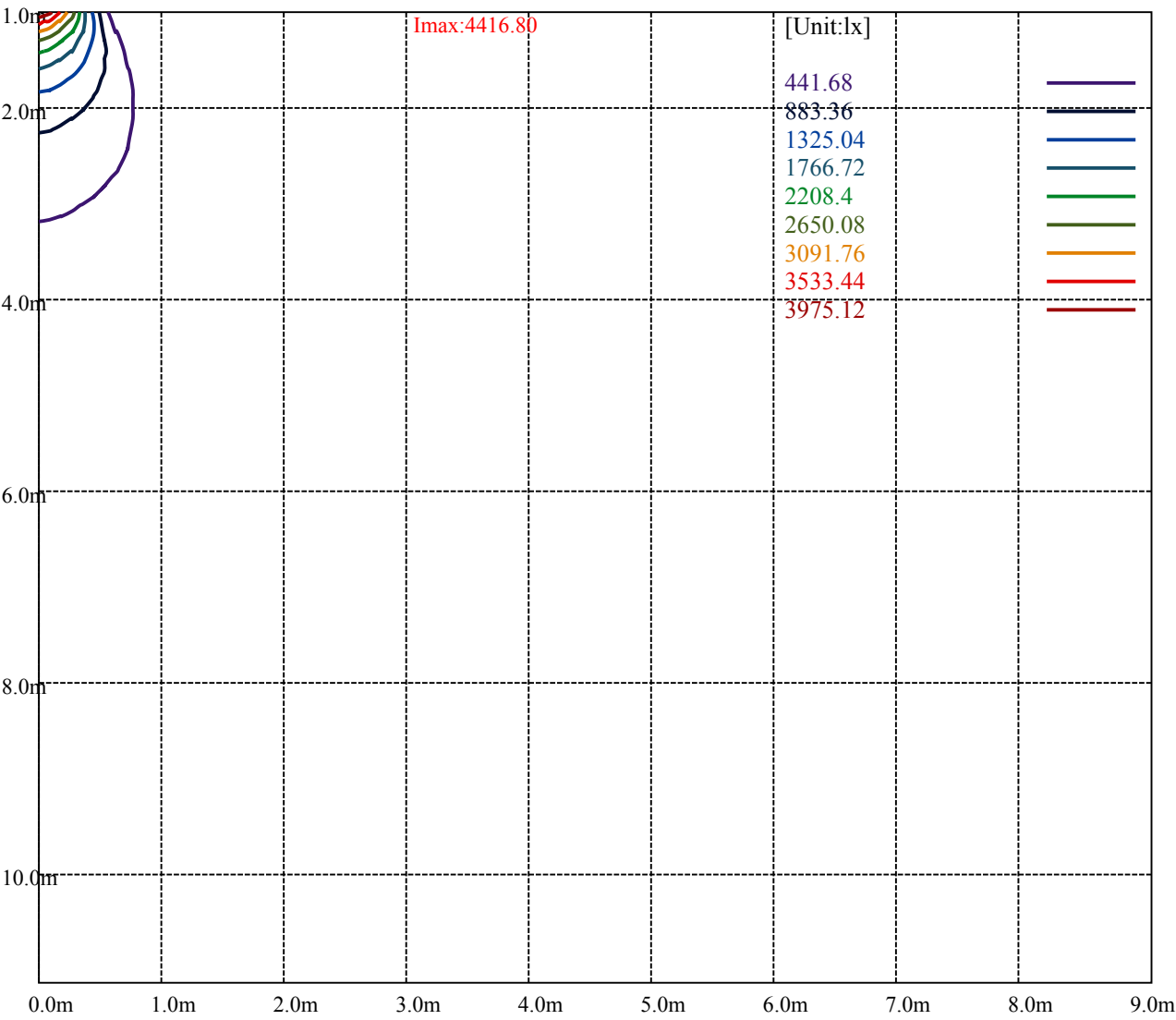
[Unit:cd]

Road

Imax:4416.80	
(10%Imax) 441.68	—
(20%Imax) 883.36	—
(30%Imax) 1325.04	—
(40%Imax) 1766.72	—
(50%Imax) 2208.4	—
(60%Imax) 2650.08	—
(70%Imax) 3091.76	—
(80%Imax) 3533.44	—
(90%Imax) 3975.12	—



(10%Emax) 110.42	
(20%Emax) 220.84	
(30%Emax) 331.26	
(40%Emax) 441.68	
(50%Emax) 552.1	
(60%Emax) 662.52	
(70%Emax) 772.94	
(80%Emax) 883.36	
(90%Emax) 993.78	



Luminance Table

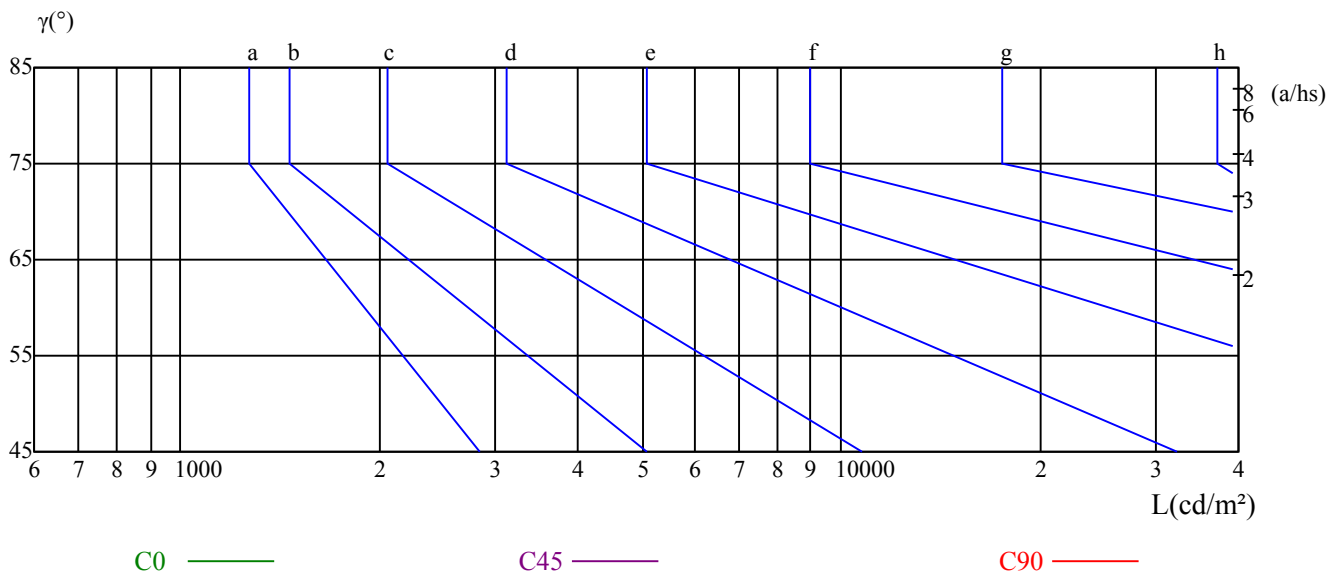
γ	45	50	55	60	65	70	75	80	85
C0	0	0	0	0	0	0	0	0	0
C45	0	0	0	0	0	0	0	0	0
C90	0	0	0	0	0	0	0	0	0

L(Hor)(65)	L(Ver)(65)	L45(65)	L(Hor)(75)	L(Ver)(75)	L45(75)	L(Hor)(85)	L(Ver)(85)	L45(85)
0	0	0	0	0	0	0	0	0

Glare Table

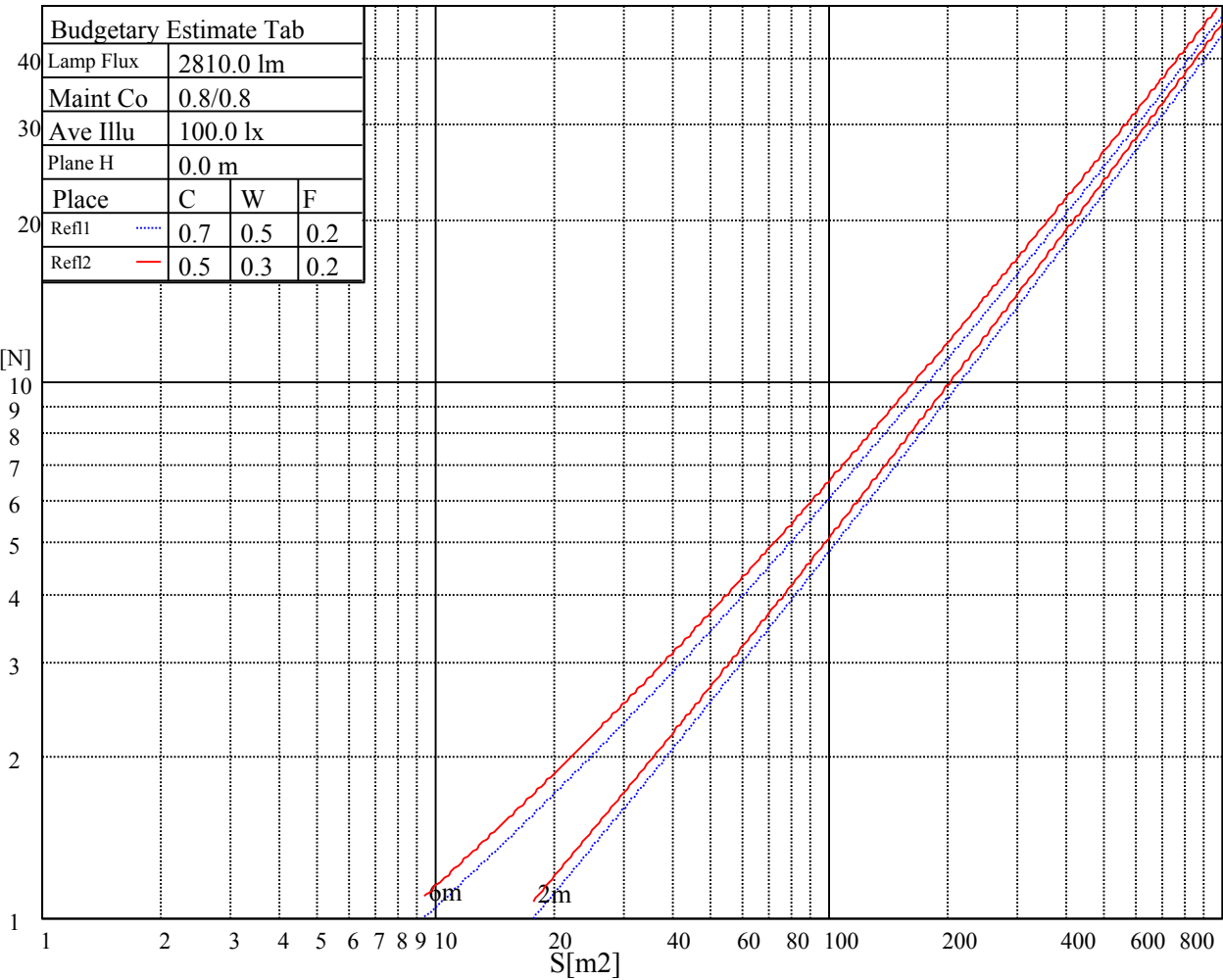
Glare	Quality	Service Values Illuminance(lx)							
1.15	A	2000	1000	500	≤ 300				
1.5	B		2000	1000	500	≤ 300			
1.85	C			2000	1000	500	≤ 300		
2.2	D				2000	1000	500	≤ 300	
2.55	E					2000	1000	500	≤ 300
		a	b	c	d	e	f	g	h

Luminance Limiting Curve

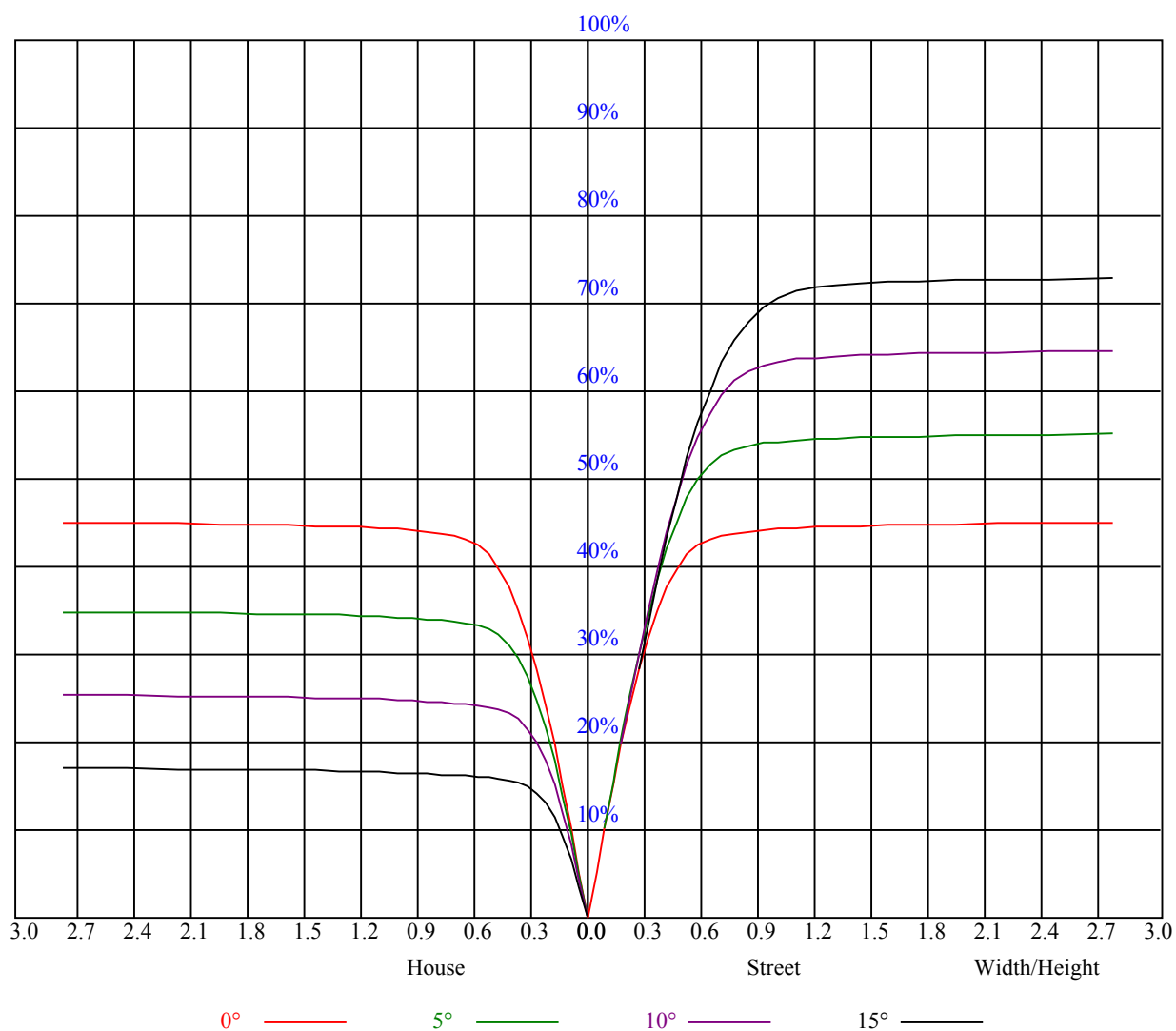


Illumination assessment according UGR											
Rf of Ceiling	70	70	50	50	30	70	70	50	50	30	
Rf of Wall	50	30	50	30	30	50	30	50	30	30	
Rf of Floor	20	20	20	20	20	20	20	20	20	20	
Room dimensions		Viewed crosswise					Viewed endwise				
X	Y										
2H	2H	非数字	非数字	非数字	非数字	非数字	非数字	非数字	非数字	非数字	
	3H	非数字	非数字	非数字	非数字	非数字	非数字	非数字	非数字	非数字	
	4H	非数字	非数字	非数字	非数字	非数字	非数字	非数字	非数字	非数字	
	6H	非数字	非数字	非数字	非数字	非数字	非数字	非数字	非数字	非数字	
	8H	非数字	非数字	非数字	非数字	非数字	非数字	非数字	非数字	非数字	
4H	12H	非数字	非数字	非数字	非数字	非数字	非数字	非数字	非数字	非数字	
	2H	非数字	非数字	非数字	非数字	非数字	非数字	非数字	非数字	非数字	
	3H	非数字	非数字	非数字	非数字	非数字	非数字	非数字	非数字	非数字	
	4H	非数字	非数字	非数字	非数字	非数字	非数字	非数字	非数字	非数字	
	6H	非数字	非数字	非数字	非数字	非数字	非数字	非数字	非数字	非数字	
8H	8H	非数字	非数字	非数字	非数字	非数字	非数字	非数字	非数字	非数字	
	12H	非数字	非数字	非数字	非数字	非数字	非数字	非数字	非数字	非数字	
	4H	非数字	非数字	非数字	非数字	非数字	非数字	非数字	非数字	非数字	
	6H	非数字	非数字	非数字	非数字	非数字	非数字	非数字	非数字	非数字	
	8H	非数字	非数字	非数字	非数字	非数字	非数字	非数字	非数字	非数字	
12H	12H	非数字	非数字	非数字	非数字	非数字	非数字	非数字	非数字	非数字	
	4H	非数字	非数字	非数字	非数字	非数字	非数字	非数字	非数字	非数字	
	6H	非数字	非数字	非数字	非数字	非数字	非数字	非数字	非数字	非数字	
	8H	非数字	非数字	非数字	非数字	非数字	非数字	非数字	非数字	非数字	
Variation with the observer position at spacings:											
S = 1.0H		非数字/非数字					非数字/非数字				
S = 1.5H		非数字/非数字					非数字/非数字				
S = 2.0H		非数字/非数字					非数字/非数字				
Standard tables:		BK0					BK0				
Uncorrected UGR		负无穷大					负无穷大				

UGR calculation is based on CIE Publ. 117 ,S/H = 0.25



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	1.08	1.08	1.08	1.06	1.06	1.06	1.01	1.01	1.01	0.97	0.97	0.97	0.93	0.93	0.93	0.91
1	1.01	0.99	0.97	0.99	0.97	0.95	0.95	0.94	0.92	0.92	0.91	0.89	0.89	0.88	0.87	0.85
2	0.94	0.91	0.88	0.93	0.90	0.87	0.90	0.87	0.85	0.87	0.85	0.83	0.85	0.83	0.82	0.80
3	0.89	0.85	0.81	0.88	0.84	0.81	0.85	0.82	0.79	0.83	0.81	0.78	0.81	0.79	0.77	0.76
4	0.84	0.79	0.76	0.83	0.79	0.75	0.81	0.77	0.75	0.79	0.76	0.74	0.78	0.75	0.73	0.72
5	0.79	0.75	0.71	0.79	0.74	0.71	0.77	0.73	0.70	0.76	0.72	0.70	0.74	0.71	0.69	0.68
6	0.75	0.71	0.67	0.75	0.70	0.67	0.73	0.69	0.66	0.72	0.69	0.66	0.71	0.68	0.66	0.64
7	0.72	0.67	0.63	0.71	0.67	0.63	0.70	0.66	0.63	0.69	0.65	0.63	0.68	0.65	0.62	0.61
8	0.68	0.63	0.60	0.68	0.63	0.60	0.67	0.63	0.60	0.66	0.62	0.60	0.65	0.62	0.59	0.58
9	0.65	0.60	0.57	0.65	0.60	0.57	0.64	0.60	0.57	0.63	0.59	0.57	0.63	0.59	0.57	0.55
10	0.62	0.58	0.54	0.62	0.57	0.54	0.61	0.57	0.54	0.61	0.57	0.54	0.60	0.57	0.54	0.53



NATA 2-2646-L

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	4407.25	4373.49	4333.08	4277.73	4217.94	4139.90	4074.02	4009.81	3932.32
45.0	4421.09	4409.47	4371.27	4325.88	4253.37	4193.59	4129.93	4061.29	3984.35
90.0	4404.49	4349.69	4298.76	4240.64	4169.23	4084.54	4015.90	3955.01	3886.93
135.0	4434.38	4406.15	4359.65	4304.30	4223.48	4159.27	4091.18	4024.76	3945.05
180.0	4407.25	4424.41	4414.45	4370.17	4323.12	4262.23	4202.45	4141.56	4074.58
225.0	4421.09	4406.15	4382.90	4339.17	4294.89	4236.21	4176.98	4086.76	4025.31
270.0	4404.49	4424.97	4427.18	4405.04	4372.93	4330.87	4269.98	4211.86	4133.81
315.0	4434.38	4434.93	4407.81	4370.72	4336.95	4290.46	4209.09	4141.56	4069.04
360.0	4407.25	4373.49	4333.08	4277.73	4217.94	4139.90	4074.02	4009.81	3932.32
C/γ(°)	9.0	10.0	11.0	12.0	13.0	14.0	15.0	16.0	17.0
0.0	3838.22	3749.65	3658.32	3548.17	3456.28	3357.20	3253.68	3134.67	2978.58
45.0	3915.71	3853.72	3749.10	3664.96	3562.00	3471.78	3374.91	3272.50	3127.48
90.0	3802.79	3734.15	3653.89	3548.17	3464.03	3354.98	3252.02	3138.00	3024.52
135.0	3882.50	3815.52	3743.01	3651.68	3571.97	3490.60	3376.57	3281.36	3159.58
180.0	3992.66	3927.34	3857.59	3786.19	3682.68	3611.27	3504.99	3416.42	3288.56
225.0	3952.80	3859.81	3777.88	3702.05	3620.68	3502.22	3407.57	3315.13	3204.97
270.0	4070.70	3996.53	3926.23	3830.47	3751.87	3668.28	3587.47	3465.14	3366.05
315.0	4001.51	3912.39	3824.38	3747.99	3671.60	3566.43	3464.58	3335.05	3214.94
360.0	3838.22	3749.65	3658.32	3548.17	3456.28	3357.20	3253.68	3134.67	2978.58
C/γ(°)	18.0	19.0	20.0	21.0	22.0	23.0	24.0	25.0	26.0
0.0	2846.28	2670.26	2530.21	2388.51	2205.29	2060.26	1907.49	1696.59	1513.37
45.0	3006.25	2874.51	2733.91	2549.03	2401.24	2247.36	2056.94	1898.63	1728.69
90.0	2864.55	2727.83	2593.87	2463.79	2301.60	2159.90	2002.14	1839.95	1621.31
135.0	3038.36	2913.26	2784.29	2625.97	2490.91	2359.72	2224.66	2040.33	1874.83
180.0	3178.40	3046.11	2911.60	2774.32	2600.51	2461.57	2323.74	2180.93	2003.80
225.0	3040.02	2899.98	2764.91	2586.12	2448.29	2304.37	2123.92	1973.91	1776.85
270.0	3263.65	3142.42	2964.19	2823.59	2641.47	2493.13	2343.12	2151.04	1994.39
315.0	3088.18	2925.44	2779.30	2634.28	2449.40	2297.73	2145.51	1993.28	1785.71
360.0	2846.28	2670.26	2530.21	2388.51	2205.29	2060.26	1907.49	1696.59	1513.37
C/γ(°)	27.0	28.0	29.0	30.0	31.0	32.0	33.0	34.0	35.0
0.0	1090.63	1090.63	916.21	753.69	599.70	461.54	317.79	234.75	183.94
45.0	1498.98	1313.54	1133.09	921.64	759.45	607.78	441.17	330.46	285.07
90.0	1104.14	1104.14	1015.24	841.71	678.36	492.98	366.33	268.30	191.97
135.0	1692.71	1454.14	1267.60	1082.72	858.53	689.71	538.04	376.40	297.25
180.0	1849.36	1683.30	1454.14	1267.04	1079.95	855.77	683.62	500.40	375.85
225.0	1608.58	1283.10	1061.63	1015.57	839.94	676.25	527.46	370.43	273.72
270.0	1831.10	1655.07	1418.71	1229.96	1050.61	877.35	670.33	516.45	397.99
315.0	1605.81	1094.01	1094.01	1003.34	828.86	671.05	527.08	370.87	270.90
360.0	1090.63	1090.63	916.21	753.69	599.70	461.54	317.79	234.75	183.94
C/γ(°)	36.0	37.0	38.0	39.0	40.0	41.0	42.0	43.0	44.0
0.0	148.18	128.09	109.32	97.31	87.07	78.27	69.25	63.38	58.23
45.0	285.07	150.89	129.25	112.64	99.75	86.35	77.72	68.53	62.60
90.0	157.76	132.74	113.75	96.04	84.80	75.56	67.97	60.28	55.35
135.0	297.25	155.99	130.91	112.31	98.20	84.25	75.34	67.81	61.83
180.0	297.25	297.25	154.99	131.69	113.64	99.53	85.63	76.50	68.80
225.0	208.07	169.94	138.77	120.73	103.35	91.78	82.09	72.29	66.04
270.0	295.03	295.03	162.13	132.68	116.52	103.40	88.95	80.26	72.46
315.0	192.24	159.53	136.50	115.25	102.18	91.06	81.81	72.13	65.93
360.0	148.18	128.09	109.32	97.31	87.07	78.27	69.25	63.38	58.23

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	53.97	49.21	46.00	43.07	39.85	37.59	35.48	33.27	31.61
45.0	57.35	52.09	48.38	45.06	42.12	38.91	36.64	34.60	32.82
90.0	50.21	46.77	43.84	40.57	38.30	36.31	34.04	32.38	31.00
135.0	55.69	51.64	48.10	44.28	41.68	39.25	36.64	34.76	33.05
180.0	61.44	56.57	52.48	48.05	44.95	42.29	39.30	37.14	35.20
225.0	60.61	56.07	51.15	47.66	44.62	41.85	38.80	36.59	34.65
270.0	66.09	59.62	54.86	51.20	47.55	43.95	41.24	38.97	36.15
315.0	60.56	55.91	51.04	47.60	44.50	41.24	38.80	36.53	34.21
360.0	53.97	49.21	46.00	43.07	39.85	37.59	35.48	33.27	31.61
C/ γ (°)	54.0	55.0	56.0	57.0	58.0	59.0	60.0	61.0	62.0
0.0	30.11	28.51	27.40	26.35	25.13	24.30	23.53	22.81	21.98
45.0	30.89	29.39	28.12	26.74	25.74	24.85	23.75	23.03	22.36
90.0	29.67	28.12	27.01	26.02	25.19	24.13	23.41	22.58	21.98
135.0	31.33	29.84	28.67	27.57	26.40	25.46	24.63	23.80	22.92
180.0	33.43	31.55	30.11	28.89	27.73	26.51	25.57	24.74	23.75
225.0	32.55	31.05	29.67	28.17	27.12	26.07	24.96	24.13	23.36
270.0	34.37	32.27	30.78	29.45	27.95	26.96	25.96	25.08	24.02
315.0	32.60	31.00	29.28	28.12	27.01	26.02	24.91	24.08	23.30
360.0	30.11	28.51	27.40	26.35	25.13	24.30	23.53	22.81	21.98
C/ γ (°)	63.0	64.0	65.0	66.0	67.0	68.0	69.0	70.0	71.0
0.0	21.37	20.76	20.15	19.54	19.04	18.43	17.99	17.55	16.99
45.0	21.64	21.03	20.43	19.93	19.32	18.88	18.38	17.99	17.44
90.0	21.37	20.65	20.15	19.65	19.15	18.60	18.10	17.66	17.27
135.0	22.31	21.70	20.98	20.43	19.76	19.32	18.82	18.21	17.71
180.0	23.03	22.20	21.53	20.98	20.43	19.76	19.26	18.76	18.32
225.0	22.64	21.81	21.20	20.59	20.04	19.37	18.93	18.32	17.88
270.0	23.25	22.53	21.86	21.26	20.54	19.98	19.37	18.88	18.38
315.0	22.53	21.75	21.15	20.43	19.93	19.32	18.76	18.27	17.77
360.0	21.37	20.76	20.15	19.54	19.04	18.43	17.99	17.55	16.99
C/ γ (°)	72.0	73.0	74.0	75.0	76.0	77.0	78.0	79.0	80.0
0.0	16.61	16.22	15.78	15.22	14.83	14.39	14.00	13.56	13.17
45.0	16.94	16.55	16.11	15.72	15.22	14.89	14.50	14.06	13.62
90.0	16.72	16.33	15.94	15.44	15.00	14.61	14.12	13.78	13.34
135.0	17.33	16.83	16.38	15.94	15.55	15.11	14.61	14.28	13.89
180.0	17.77	17.33	16.94	16.55	16.00	15.61	15.11	14.67	14.28
225.0	17.44	16.88	16.50	16.00	15.50	15.00	14.61	14.17	13.67
270.0	17.82	17.38	16.88	16.38	15.89	15.50	15.00	14.50	14.06
315.0	17.21	16.77	16.33	15.89	15.33	14.89	14.50	14.06	13.62
360.0	16.61	16.22	15.78	15.22	14.83	14.39	14.00	13.56	13.17
C/ γ (°)	81.0	82.0	83.0	84.0	85.0	86.0	87.0	88.0	89.0
0.0	12.84	12.51	12.18	11.90	11.73	11.29	11.13	10.74	11.02
45.0	13.34	12.90	12.57	12.23	12.01	11.51	11.29	11.02	10.68
90.0	13.01	12.73	12.34	12.07	11.62	11.35	11.18	10.85	10.63
135.0	13.40	13.06	12.62	12.34	11.96	11.62	11.40	11.13	10.85
180.0	13.78	13.45	12.95	12.62	12.29	11.96	11.68	11.40	11.18
225.0	13.34	12.95	12.57	12.23	12.01	11.68	11.46	11.18	10.85
270.0	13.67	13.23	12.84	12.51	12.12	11.85	11.51	11.24	11.02
315.0	13.23	12.84	12.51	12.23	11.90	11.73	11.29	11.07	10.74
360.0	12.84	12.51	12.18	11.90	11.73	11.29	11.13	10.74	11.02

Intensity data(cd)

Appendix Page: 19 Total:19

C/ $\gamma(^{\circ})$	90.0
0.0	10.96
45.0	10.74
90.0	10.68
135.0	10.68
180.0	10.90
225.0	10.68
270.0	10.79
315.0	11.02
360.0	10.96