



NATA LIGHTING CO.,LTD.
www.nata.cn
Email:info@nata.com
Tel:+86-750-3770000 Fax:+86 750 3771111
Address:Address:380JinOu Road,GaoXin Zone,Jiang Men City,Guangdong,China

Nata

Client:

LumCAT: 2-2569-L

Luminaire: 92.70.411.00

Report No: 2024830-B015

Ballast type: AC

Test No: 2024830-C015

Voltage(V): 36.460

LampCAT: LUMILEDS LUXEON CoB 1205 Current(A): 0.598

Lamp flux(lm): 2555.0 Power (W): 21.800

Number of Lamps: 1 PF: 0.000

Length(mm): 0 Width(mm): 0

Phm Type: C Height(mm): 0

Photometric Results

Lumens(lm): 2300.10, Efficiency(%): 90.02% , Luminous Efficacy(lm/W): 105.51

Central intensity(cd): 3913.738, Maximum intensity(cd): 3913.738

Angle of maximum intensity: C=0.0 γ =0.0

Beam Angle(50%Imax): [C0/180]Total=45.6

[C90/270]Total=45.6

Field angle(10%Imax): [C0/180]Total=72.0

[C90/270]Total=72.0

Maximum s/h(1/2): C0_180=0.71 C90_270=0.71

Maximum s/h(1/4): C0_180=0.73 C90_270=0.73

Up flux rate of lamp(%): 0.00%

Down flux rate of lamp(%): 90.02%

Up flux rate of LUM(%): - -

Down flux rate of LUM(%): 100.00%

CIE Type : Direct lighting

Output flux ratio in π solid angle : 99.220%

Equipment: GMS 1800
Temperature(°C): 25.0

Date: 2024/8/30
Humidity(%): 60.0%

Operator: NT
Distance(m): 7.25

$\gamma(^{\circ})$	Average I(cd)	Zonal F(lm)	Sum F(lm)	Eff Flux(%)	Eff Sum(%)
0.0	3913.738	0.000	0	0.00%	0.00%
1.0	3912.687	3.745	3.745	0.15%	0.16%
2.0	3894.927	11.206	14.951	0.44%	0.65%
3.0	3870.275	18.572	33.523	0.73%	1.46%
4.0	3825.006	25.759	59.281	1.01%	2.58%
5.0	3767.838	32.664	91.945	1.28%	4.00%
6.0	3709.460	39.295	131.241	1.54%	5.71%
7.0	3628.816	45.549	176.789	1.78%	7.69%
8.0	3535.419	51.273	228.062	2.01%	9.92%
9.0	3443.415	56.560	284.622	2.21%	12.37%
10.0	3347.719	61.457	346.079	2.41%	15.05%
11.0	3245.899	65.884	411.963	2.58%	17.91%
12.0	3138.934	69.795	481.758	2.73%	20.95%
13.0	3035.018	73.269	555.028	2.87%	24.13%
14.0	2927.488	76.320	631.347	2.99%	27.45%
15.0	2820.727	78.914	710.261	3.09%	30.88%
16.0	2709.971	81.040	791.301	3.17%	34.40%
17.0	2603.578	82.746	874.048	3.24%	38.00%
18.0	2491.292	84.003	958.051	3.29%	41.65%
19.0	2393.381	84.983	1043.034	3.33%	45.35%
20.0	2273.026	85.408	1128.442	3.34%	49.06%
21.0	2163.413	85.189	1213.631	3.33%	52.76%
22.0	2058.098	84.833	1298.464	3.32%	56.45%
23.0	1931.133	83.705	1382.169	3.28%	60.09%
24.0	1815.666	81.918	1464.087	3.21%	63.65%
25.0	1699.976	79.938	1544.025	3.13%	67.13%
26.0	1576.363	77.338	1621.364	3.03%	70.49%
27.0	1442.709	73.862	1695.226	2.89%	73.70%
28.0	1306.244	69.598	1764.824	2.72%	76.73%
29.0	1183.057	65.127	1829.951	2.55%	79.56%
30.0	1079.332	61.084	1891.035	2.39%	82.22%
31.0	955.553	56.628	1947.663	2.22%	84.68%
32.0	833.017	51.240	1998.903	2.01%	86.91%
33.0	701.887	45.219	2044.122	1.77%	88.87%
34.0	584.291	38.924	2083.046	1.52%	90.56%
35.0	483.792	33.171	2116.216	1.30%	92.01%
36.0	392.451	27.900	2144.116	1.09%	93.22%
37.0	312.924	23.005	2167.122	0.90%	94.22%

$\gamma(^{\circ})$	Average I(cd)	Zonal F(lm)	Sum F(lm)	Eff Flux(%)	Eff Sum(%)
38.0	258.332	19.068	2186.189	0.75%	95.05%
39.0	197.451	15.557	2201.746	0.61%	95.72%
40.0	166.262	12.685	2214.431	0.50%	96.28%
41.0	119.422	10.173	2224.604	0.40%	96.72%
42.0	94.829	7.784	2232.389	0.30%	97.06%
43.0	77.707	6.391	2238.78	0.25%	97.33%
44.0	64.987	5.386	2244.165	0.21%	97.57%
45.0	55.046	4.613	2248.778	0.18%	97.77%
46.0	47.510	4.011	2252.789	0.16%	97.94%
47.0	41.518	3.541	2256.33	0.14%	98.10%
48.0	36.616	3.159	2259.489	0.12%	98.23%
49.0	32.556	2.841	2262.329	0.11%	98.36%
50.0	29.106	2.571	2264.9	0.10%	98.47%
51.0	26.255	2.342	2267.242	0.09%	98.57%
52.0	23.824	2.149	2269.391	0.08%	98.66%
53.0	21.748	1.982	2271.374	0.08%	98.75%
54.0	19.967	1.839	2273.212	0.07%	98.83%
55.0	18.528	1.718	2274.931	0.07%	98.91%
56.0	17.142	1.612	2276.543	0.06%	98.98%
57.0	16.018	1.516	2278.059	0.06%	99.04%
58.0	15.046	1.437	2279.495	0.06%	99.10%
59.0	14.113	1.363	2280.858	0.05%	99.16%
60.0	13.331	1.297	2282.155	0.05%	99.22%
61.0	12.595	1.237	2283.392	0.05%	99.27%
62.0	11.813	1.176	2284.568	0.05%	99.32%
63.0	11.294	1.124	2285.692	0.04%	99.37%
64.0	10.703	1.079	2286.772	0.04%	99.42%
65.0	10.131	1.031	2287.803	0.04%	99.47%
66.0	9.626	0.986	2288.789	0.04%	99.51%
67.0	9.120	0.943	2289.731	0.04%	99.55%
68.0	8.620	0.899	2290.63	0.04%	99.59%
69.0	8.114	0.854	2291.483	0.03%	99.63%
70.0	7.635	0.809	2292.292	0.03%	99.66%
71.0	7.149	0.764	2293.056	0.03%	99.69%
72.0	6.675	0.719	2293.775	0.03%	99.73%
73.0	6.216	0.674	2294.449	0.03%	99.75%
74.0	5.788	0.631	2295.08	0.02%	99.78%
75.0	5.394	0.591	2295.671	0.02%	99.81%

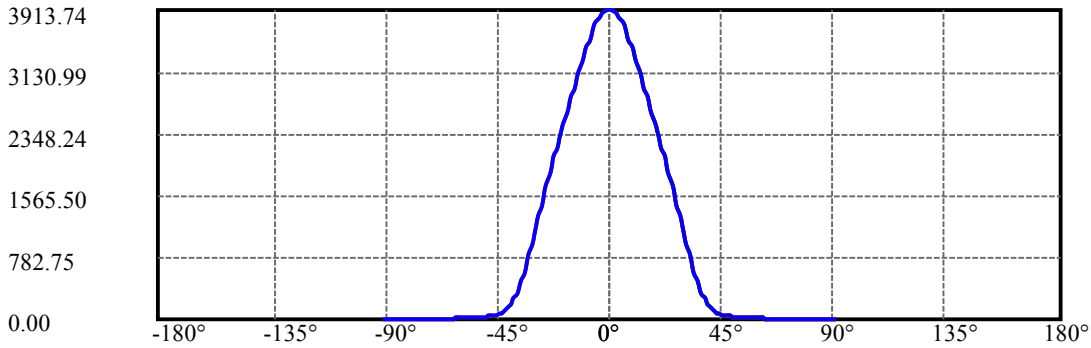
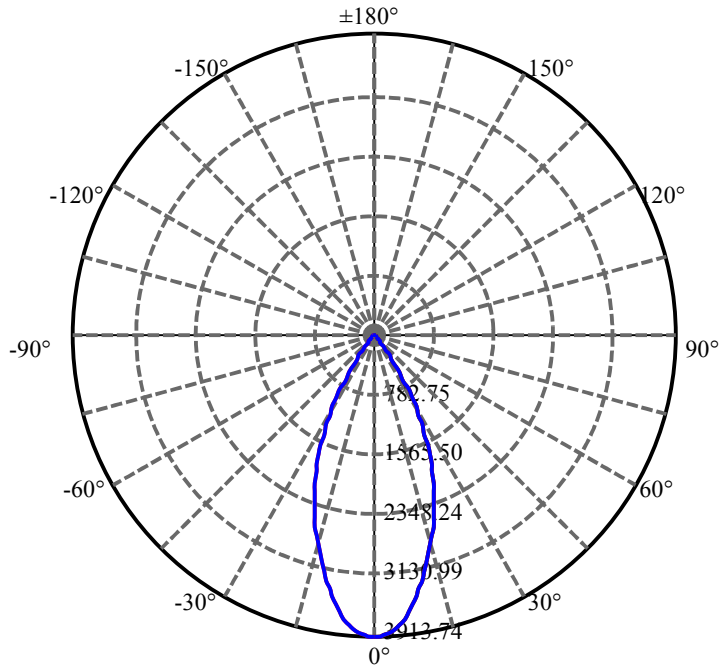
$\gamma(^{\circ})$	Average I(cd)	Zonal F(lm)	Sum F(lm)	Eff Flux(%)	Eff Sum(%)
76.0	4.980	0.551	2296.222	0.02%	99.83%
77.0	4.573	0.509	2296.731	0.02%	99.85%
78.0	4.172	0.468	2297.199	0.02%	99.87%
79.0	3.785	0.428	2297.627	0.02%	99.89%
80.0	3.449	0.390	2298.017	0.02%	99.91%
81.0	3.062	0.352	2298.369	0.01%	99.92%
82.0	2.714	0.313	2298.682	0.01%	99.94%
83.0	2.411	0.279	2298.961	0.01%	99.95%
84.0	2.083	0.245	2299.206	0.01%	99.96%
85.0	1.794	0.212	2299.417	0.01%	99.97%
86.0	1.583	0.185	2299.602	0.01%	99.98%
87.0	1.334	0.160	2299.761	0.01%	99.99%
88.0	1.110	0.134	2299.895	0.01%	99.99%
89.0	0.920	0.111	2300.007	0.00%	100.00%
90.0	0.775	0.093	2300.1	0.00%	100.00%

ZONAL LUMEN SUMMARY

Zone	Lumens	%Lamp	%Fixt
0-30	1891.03	74.01%	82.22%
0-40	2214.43	86.67%	96.28%
0-60	2282.16	89.32%	99.22%
0-90	2300.01	90.02%	100.00%
0-120	2300.01	90.02%	100.00%
0-180	2300.10	90.02%	100.00%
60-90	17.85	0.70%	0.78%
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%
0-29.17	1840.08	72.02%	80.00%

ZONAL LUMEN SUMMARY

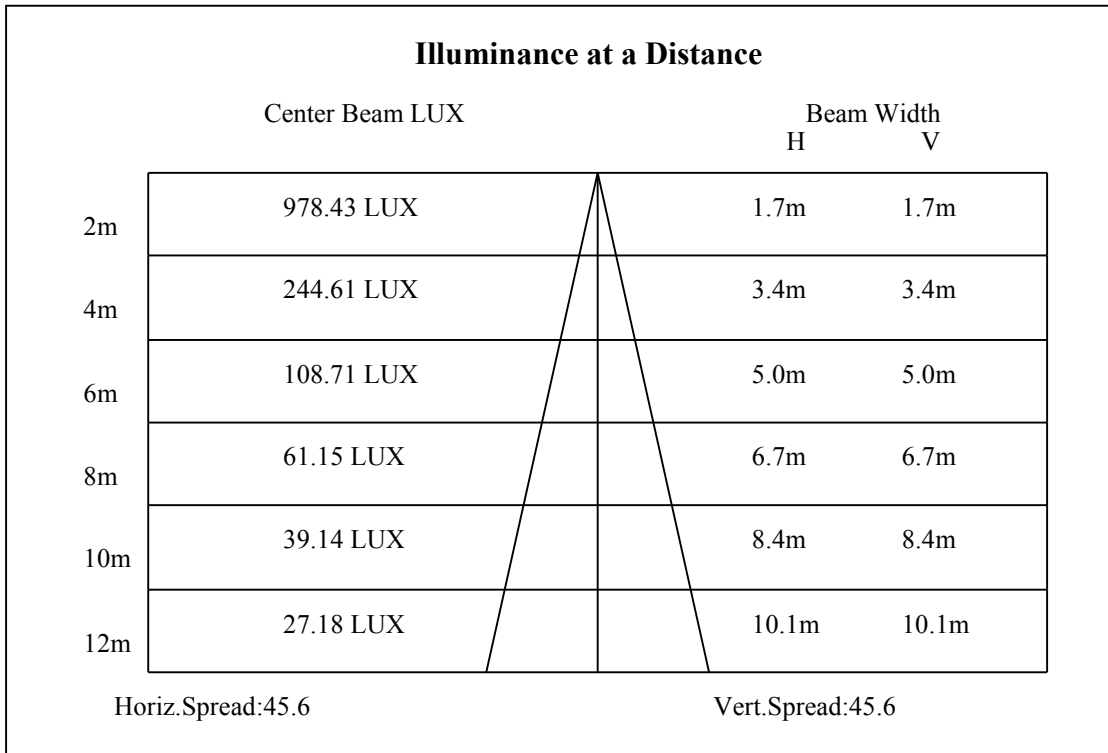
0-10	346.08
10-20	782.36
20-30	762.59
30-40	323.40
40-50	50.47
50-60	17.25
60-70	10.14
70-80	5.72
80-90	1.99
90-100	0.00
100-110	0.00
110-120	0.00
120-130	0.00
130-140	0.00
140-150	0.00
150-160	0.00
160-170	0.00
170-180	0.00

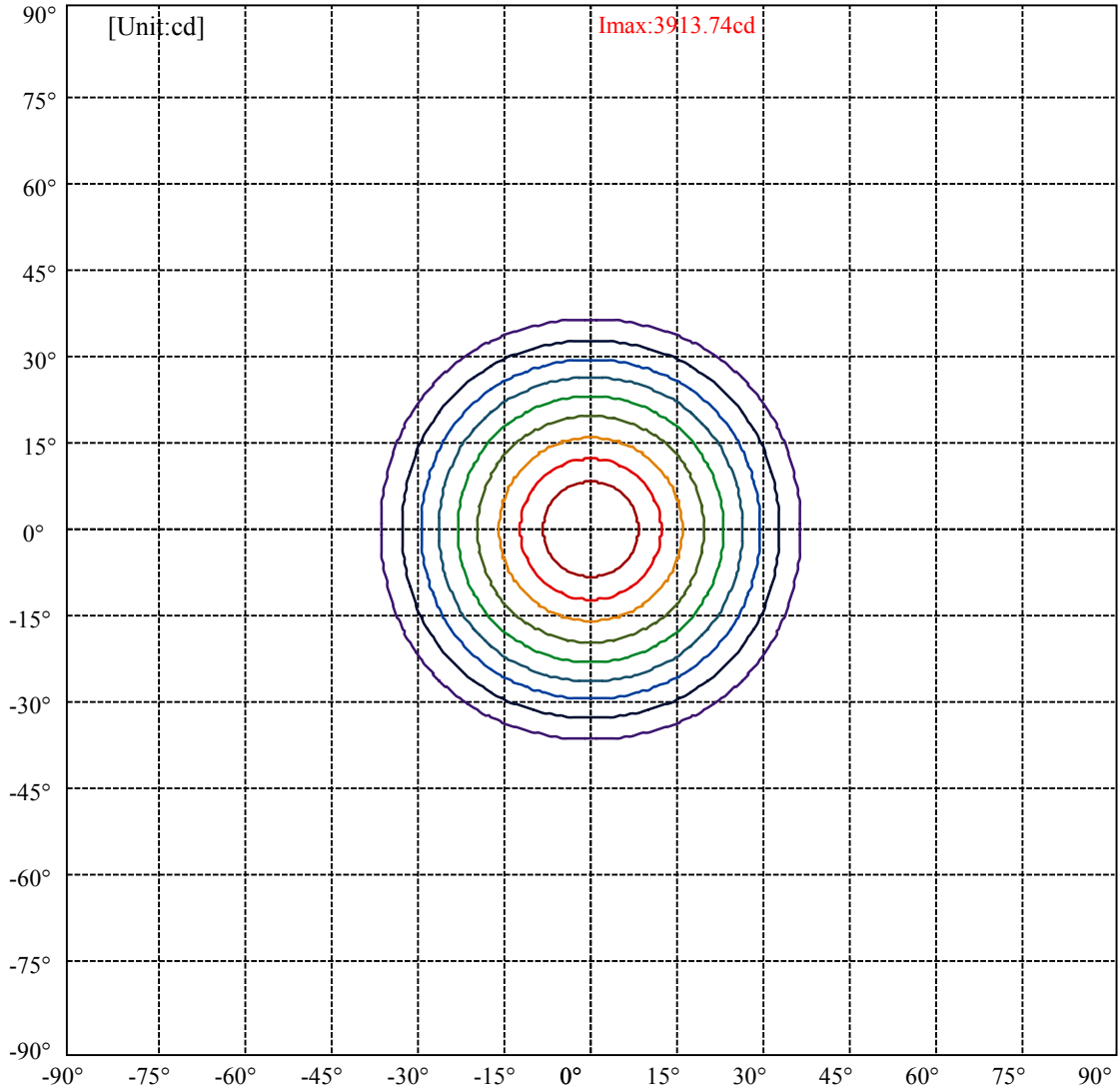


C0(Max): —————
C0/C180: —————
C90/C270: —————

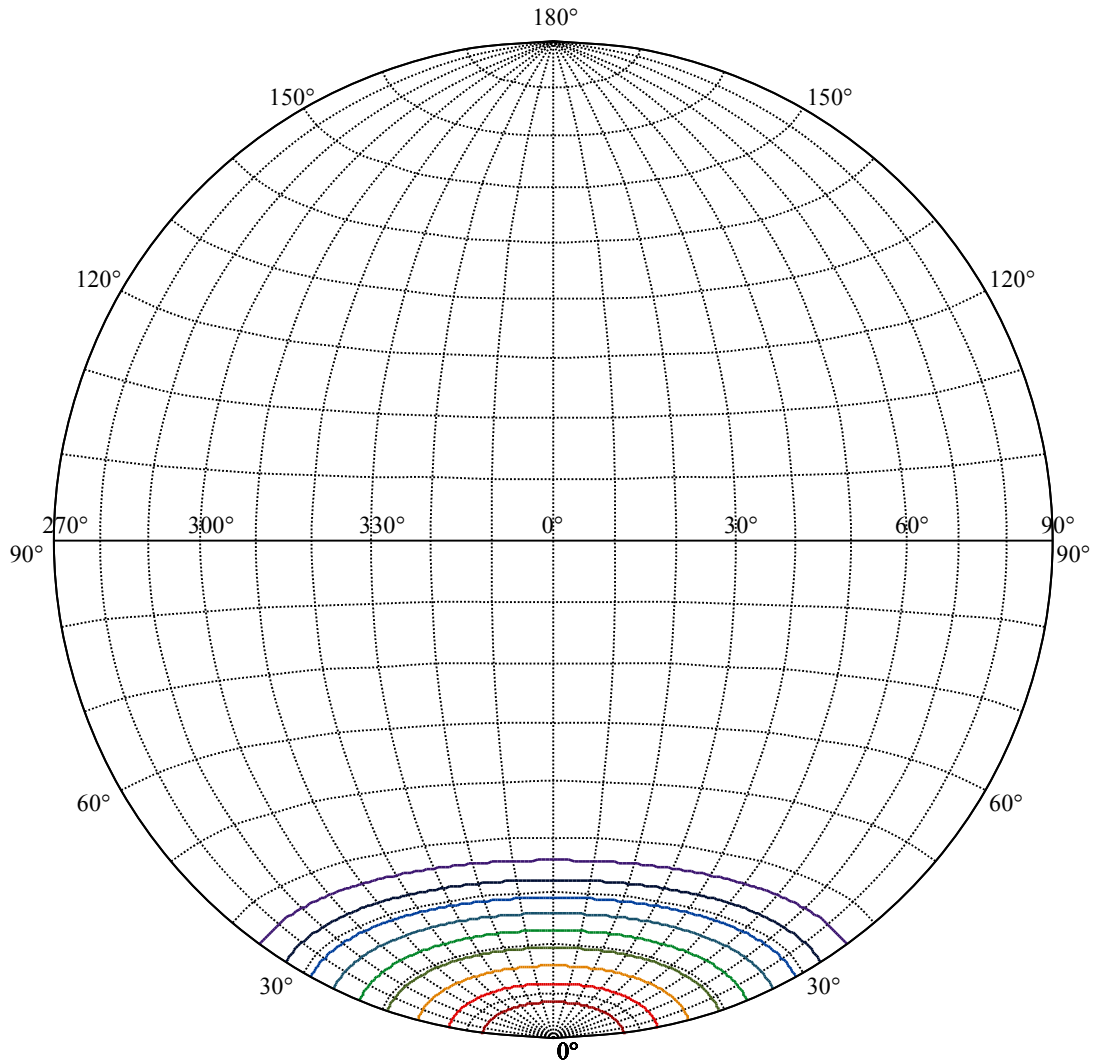
Field angle(10%Imax):C0/180Left:36.0 Right:36.0
:C90/270Left:36.0 Right:36.0

Beam Angle(50%Imax):C0/180Left:22.8 Right:22.8
:C90/270Left:22.8 Right:22.8





(10%Imax) 391.374	—
(20%Imax) 782.748	—
(30%Imax) 1174.12	—
(40%Imax) 1565.5	—
(50%Imax) 1956.87	—
(60%Imax) 2348.24	—
(70%Imax) 2739.62	—
(80%Imax) 3130.99	—
(90%Imax) 3522.36	—



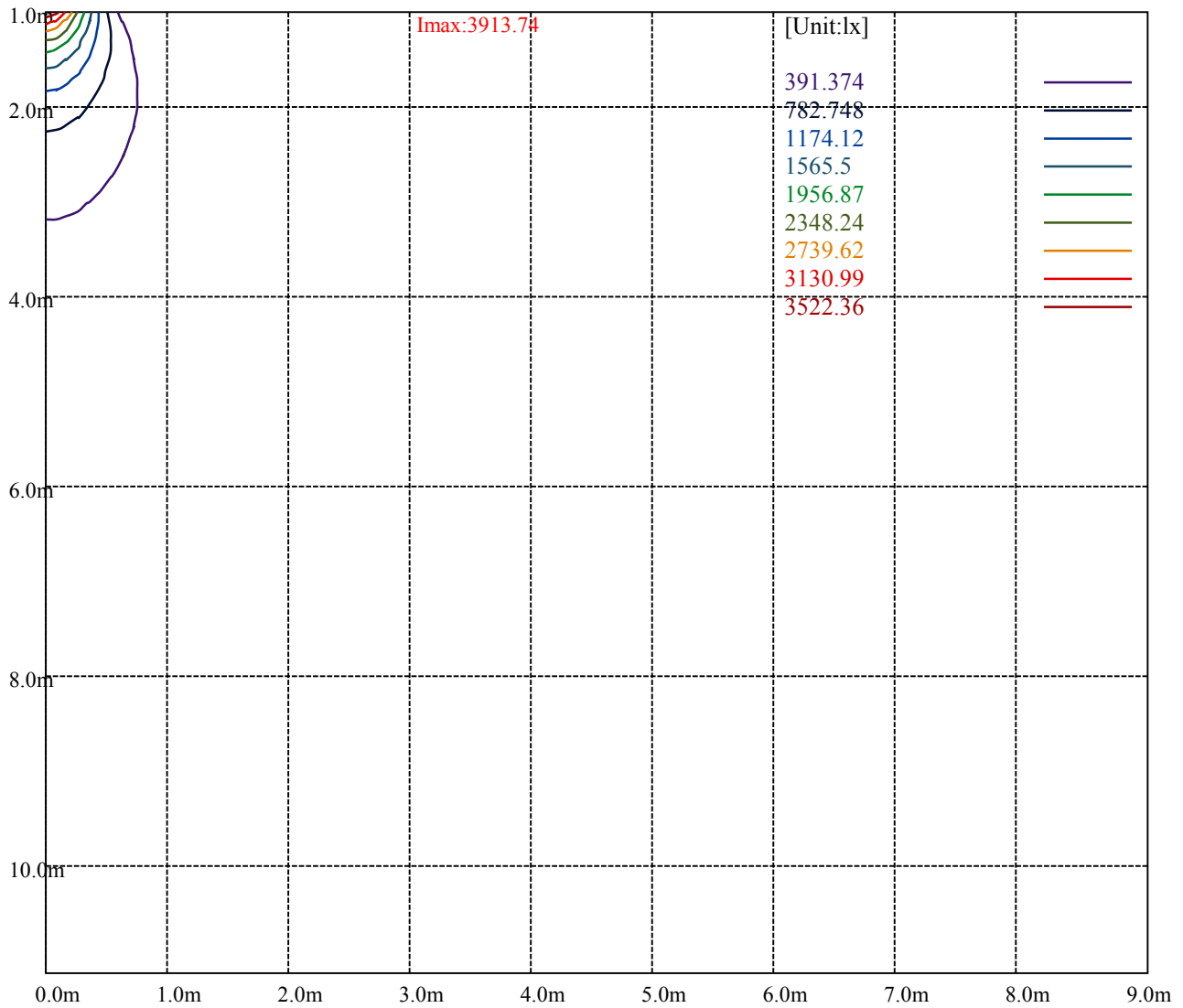
House

[Unit:cd]

Road

Imax:3913.74

(10%Imax) 391.374	—
(20%Imax) 782.748	—
(30%Imax) 1174.12	—
(40%Imax) 1565.5	—
(50%Imax) 1956.87	—
(60%Imax) 2348.24	—
(70%Imax) 2739.62	—
(80%Imax) 3130.99	—
(90%Imax) 3522.36	—



Luminance Table

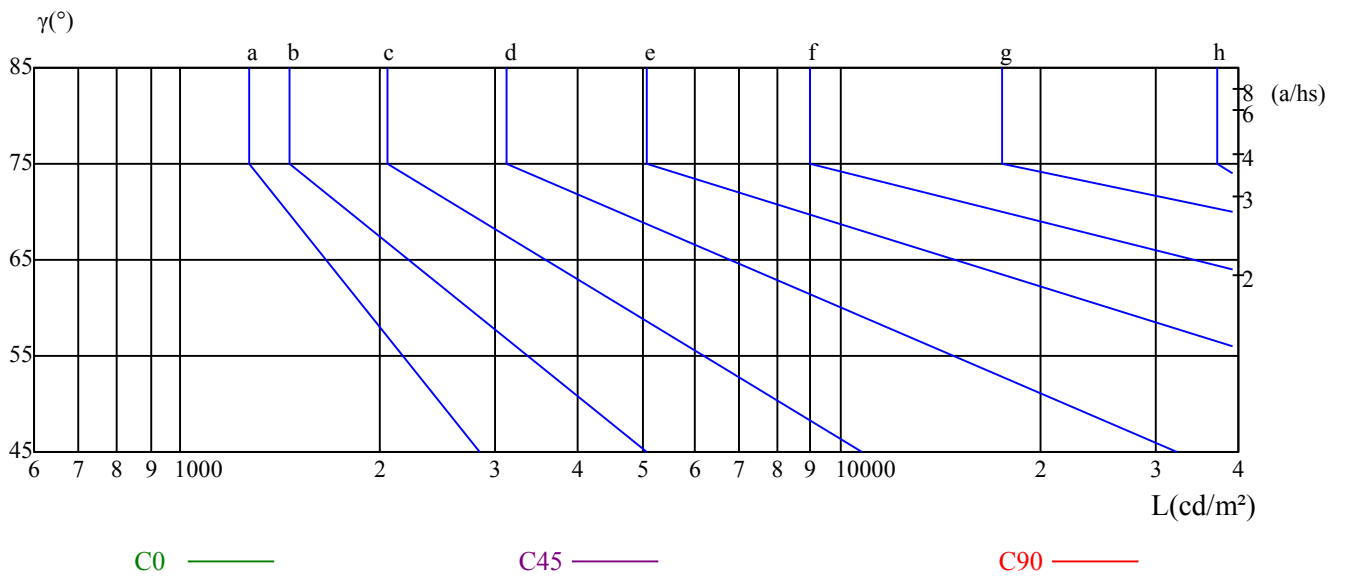
γ	45	50	55	60	65	70	75	80	85
C0	0	0	0	0	0	0	0	0	0
C45	0	0	0	0	0	0	0	0	0
C90	0	0	0	0	0	0	0	0	0

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										
	3H										
	4H										
	6H										
	8H										
	12H										
4H	2H										
	3H										
	4H										
	6H										
	8H										
	12H										
8H	4H										
	6H										
	8H										
	12H										
12H	4H										
	6H										
	8H										
Variation with the observer position at spacings:											
S = 1.0H											
S = 1.5H											
S = 2.0H											
Standard tables:											
Uncorrected UGR											