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

Client:
LumCAT: 2-2645-L
Luminaire: 92.70.411.00
Report No: 20231016-B004
Ballast type: AC

Test No: 20231016-C004	Voltage(V): 34.170
LampCAT: NICHIA NFCWJ108B-V3	Current(A): 0.576
Lamp flux(lm): 2574.8	Power (W): 19.681
Number of Lamps: 1	PF: 0.000
Length(mm): 0	Width(mm): 0
Phm Type: C	Height(mm): 0

Photometric Results

Lumens(lm): 2416.02, Efficiency(%): 93.83% , Luminous Efficacy(lm/W): 122.76
Central intensity(cd): 5172.517, Maximum intensity(cd): 5172.517
Angle of maximum intensity: C=0.0 γ=0.0
Beam Angle(50%Imax): [C0/180]Total=40.0
[C90/270]Total=40.0
Field angle(10%Imax): [C0/180]Total=63.2
[C90/270]Total=63.2
Maximum s/h(1/2): C0_180=0.66 C90_270=0.66
Maximum s/h(1/4): C0_180=0.63 C90_270=0.63
Up flux rate of lamp(%): 0.00%
Down flux rate of lamp(%): 93.83%
Up flux rate of LUM(%): - -
Down flux rate of LUM(%): 100.00%
CIE Type : Direct lighting
Output flux ratio in π solid angle : 98.125%

Zonal flux distribution table

γ(°)	Average I(cd)	Zonal F(lm)	Sum F(lm)	Eff Flux(%)	Eff Sum(%)
0.0	5172.517	0.000	0	0.00%	0.00%
1.0	5161.170	4.944	4.944	0.19%	0.20%
2.0	5134.877	14.778	19.722	0.57%	0.82%
3.0	5092.670	24.461	44.183	0.95%	1.83%
4.0	5038.354	33.912	78.095	1.32%	3.23%
5.0	4964.664	43.032	121.128	1.67%	5.01%
6.0	4880.527	51.739	172.867	2.01%	7.16%
7.0	4789.609	60.022	232.889	2.33%	9.64%
8.0	4686.859	67.821	300.71	2.63%	12.45%
9.0	4576.497	75.074	375.785	2.92%	15.55%
10.0	4460.047	81.777	457.562	3.18%	18.94%
11.0	4339.169	87.922	545.484	3.41%	22.58%
12.0	4193.381	93.273	638.757	3.62%	26.44%
13.0	4041.297	97.725	736.482	3.80%	30.48%
14.0	3874.683	101.324	837.806	3.94%	34.68%
15.0	3694.645	103.915	941.721	4.04%	38.98%
16.0	3495.234	105.352	1047.073	4.09%	43.34%
17.0	3264.202	105.263	1152.336	4.09%	47.70%
18.0	3053.789	104.170	1256.506	4.05%	52.01%
19.0	2808.227	101.987	1358.493	3.96%	56.23%
20.0	2582.522	98.666	1457.158	3.83%	60.31%
21.0	2339.866	94.520	1551.678	3.67%	64.22%
22.0	2112.155	89.465	1641.143	3.47%	67.93%
23.0	1893.508	84.050	1725.193	3.26%	71.41%
24.0	1678.390	78.095	1803.287	3.03%	74.64%
25.0	1466.365	71.505	1874.792	2.78%	77.60%
26.0	1262.214	64.408	1939.201	2.50%	80.26%
27.0	1145.058	58.894	1998.095	2.29%	82.70%
28.0	986.830	53.975	2052.07	2.10%	84.94%
29.0	837.320	47.725	2099.795	1.85%	86.91%
30.0	708.450	41.735	2141.53	1.62%	88.64%
31.0	581.932	35.909	2177.44	1.39%	90.13%
32.0	469.281	30.116	2207.556	1.17%	91.37%
33.0	366.337	24.618	2232.174	0.96%	92.39%
34.0	281.584	19.608	2251.782	0.76%	93.20%
35.0	227.060	15.797	2267.578	0.61%	93.86%
36.0	172.703	12.729	2280.307	0.49%	94.38%
37.0	124.636	9.698	2290.004	0.38%	94.78%

Zonal flux distribution table

γ(°)	Average I(cd)	Zonal F(lm)	Sum F(lm)	Eff Flux(%)	Eff Sum(%)
38.0	100.861	7.527	2297.531	0.29%	95.10%
39.0	88.185	6.453	2303.984	0.25%	95.36%
40.0	78.201	5.803	2309.787	0.23%	95.60%
41.0	69.406	5.256	2315.043	0.20%	95.82%
42.0	62.619	4.797	2319.84	0.19%	96.02%
43.0	56.212	4.402	2324.241	0.17%	96.20%
44.0	51.354	4.060	2328.301	0.16%	96.37%
45.0	46.954	3.778	2332.079	0.15%	96.53%
46.0	43.252	3.528	2335.607	0.14%	96.67%
47.0	40.090	3.315	2338.922	0.13%	96.81%
48.0	37.239	3.126	2342.048	0.12%	96.94%
49.0	34.873	2.961	2345.009	0.12%	97.06%
50.0	32.666	2.816	2347.825	0.11%	97.18%
51.0	30.742	2.683	2350.508	0.10%	97.29%
52.0	29.130	2.569	2353.077	0.10%	97.39%
53.0	27.566	2.466	2355.543	0.10%	97.50%
54.0	26.293	2.374	2357.917	0.09%	97.60%
55.0	25.027	2.291	2360.208	0.09%	97.69%
56.0	24.010	2.216	2362.424	0.09%	97.78%
57.0	23.062	2.152	2364.576	0.08%	97.87%
58.0	22.238	2.095	2366.671	0.08%	97.96%
59.0	21.470	2.043	2368.714	0.08%	98.04%
60.0	20.785	1.996	2370.71	0.08%	98.12%
61.0	20.156	1.954	2372.664	0.08%	98.21%
62.0	19.561	1.914	2374.578	0.07%	98.28%
63.0	19.014	1.876	2376.454	0.07%	98.36%
64.0	18.516	1.842	2378.296	0.07%	98.44%
65.0	18.038	1.809	2380.105	0.07%	98.51%
66.0	17.582	1.777	2381.882	0.07%	98.59%
67.0	17.139	1.746	2383.628	0.07%	98.66%
68.0	16.724	1.715	2385.343	0.07%	98.73%
69.0	16.309	1.685	2387.028	0.07%	98.80%
70.0	15.935	1.656	2388.684	0.06%	98.87%
71.0	15.554	1.628	2390.312	0.06%	98.94%
72.0	15.208	1.600	2391.911	0.06%	99.00%
73.0	14.869	1.573	2393.484	0.06%	99.07%
74.0	14.530	1.546	2395.03	0.06%	99.13%
75.0	14.219	1.519	2396.549	0.06%	99.19%

Zonal flux distribution table

γ(°)	Average I(cd)	Zonal F(lm)	Sum F(lm)	Eff Flux(%)	Eff Sum(%)
76.0	13.859	1.490	2398.039	0.06%	99.26%
77.0	13.534	1.460	2399.5	0.06%	99.32%
78.0	13.195	1.431	2400.931	0.06%	99.38%
79.0	12.870	1.400	2402.331	0.05%	99.43%
80.0	12.565	1.371	2403.702	0.05%	99.49%
81.0	12.261	1.343	2405.045	0.05%	99.55%
82.0	11.991	1.315	2406.36	0.05%	99.60%
83.0	11.693	1.288	2407.647	0.05%	99.65%
84.0	11.431	1.260	2408.907	0.05%	99.71%
85.0	11.188	1.234	2410.142	0.05%	99.76%
86.0	11.008	1.213	2411.355	0.05%	99.81%
87.0	10.801	1.194	2412.549	0.05%	99.86%
88.0	10.600	1.172	2413.721	0.05%	99.91%
89.0	10.448	1.154	2414.875	0.04%	99.95%
90.0	10.372	1.142	2416.016	0.04%	100.00%

Zonal flux distribution table

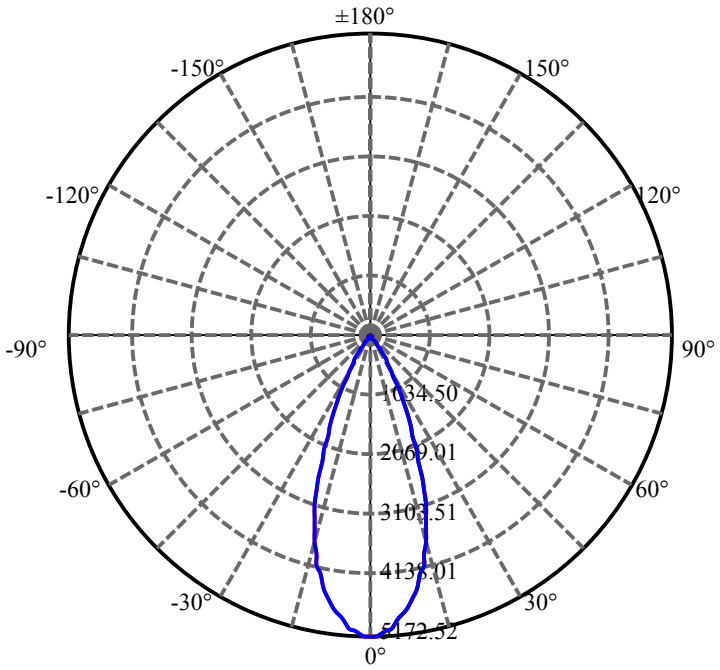
ZONAL LUMEN SUMMARY

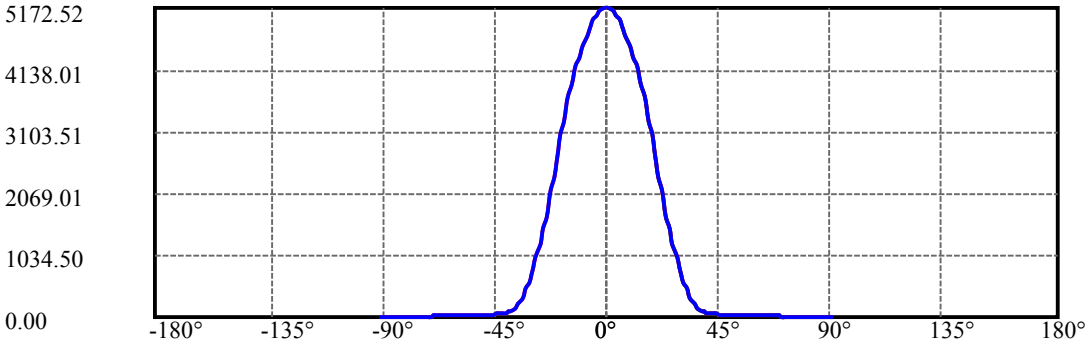
Zone	Lumens	%Lamp	%Fixt
0-30	2141.53	83.17%	88.64%
0-40	2309.79	89.71%	95.60%
0-60	2370.71	92.07%	98.12%
0-90	2414.87	93.79%	99.95%
0-120	2414.87	93.79%	99.95%
0-180	2416.02	93.83%	100.00%
60-90	44.16	1.72%	1.83%
90-120	0.00	0.00%	0.00%
90-130	0.00	0.00%	0.00%
90-150	0.00	0.00%	0.00%
90-180	0.00	0.00%	0.00%
0-25.90	1932.81	75.07%	80.00%

ZONAL LUMEN SUMMARY

0-10	457.56
10-20	999.60
20-30	684.37
30-40	168.26
40-50	38.04
50-60	22.89
60-70	17.97
70-80	15.02
80-90	11.17
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

Light Distribution Curve [Unit:cd]





C0(Max):

C0/C180:

C90/C270:

Field angle(10%Imax):C0/180Left:31.6 Right:31.6
:C90/270Left:31.6 Right:31.6

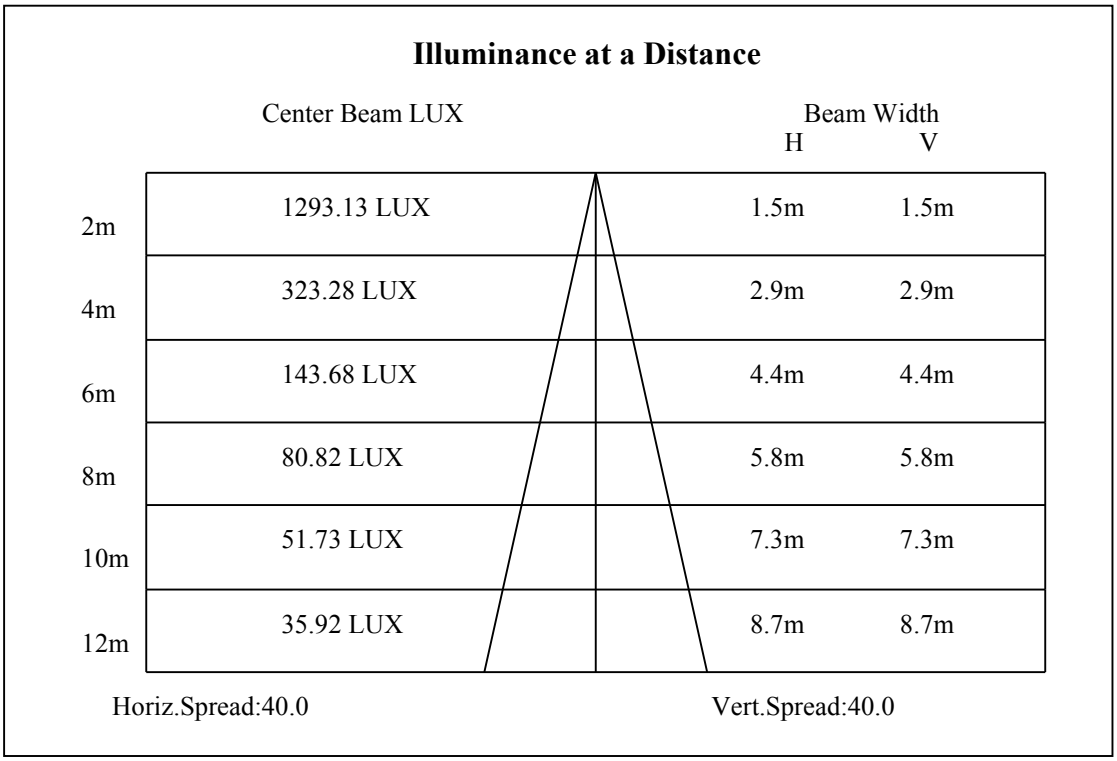
Beam Angle(50%Imax):C0/180Left:20.0 Right:20.0
:C90/270Left:20.0 Right:20.0

Equipment: GMS1980
Temperature(°C): 0.0

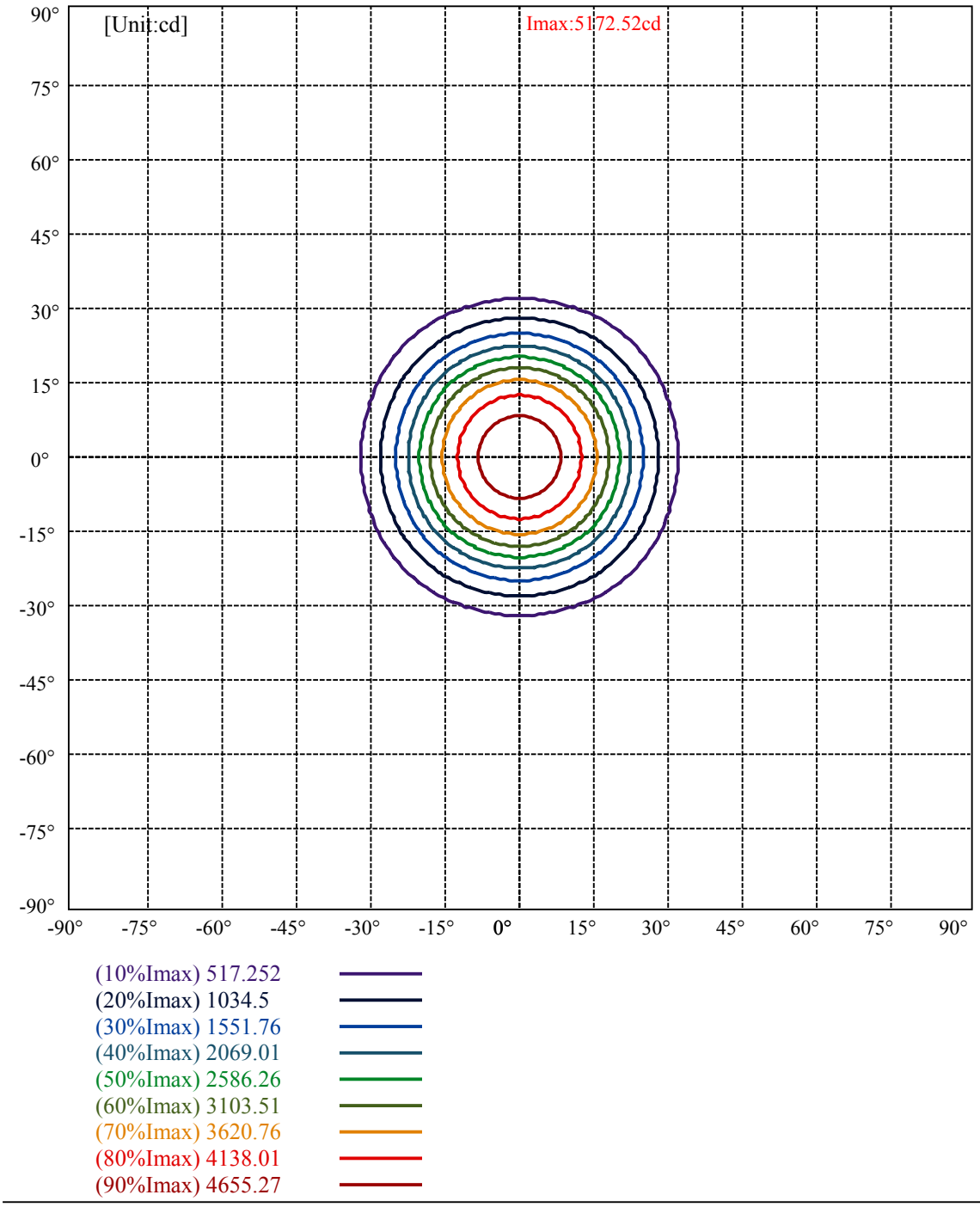
Date: 2023/10/16
Humidity(%): 0.0%

Operator: NT07
Distance(m): 7.44

Lux distance Curve



ISO-Intensity(V-H)

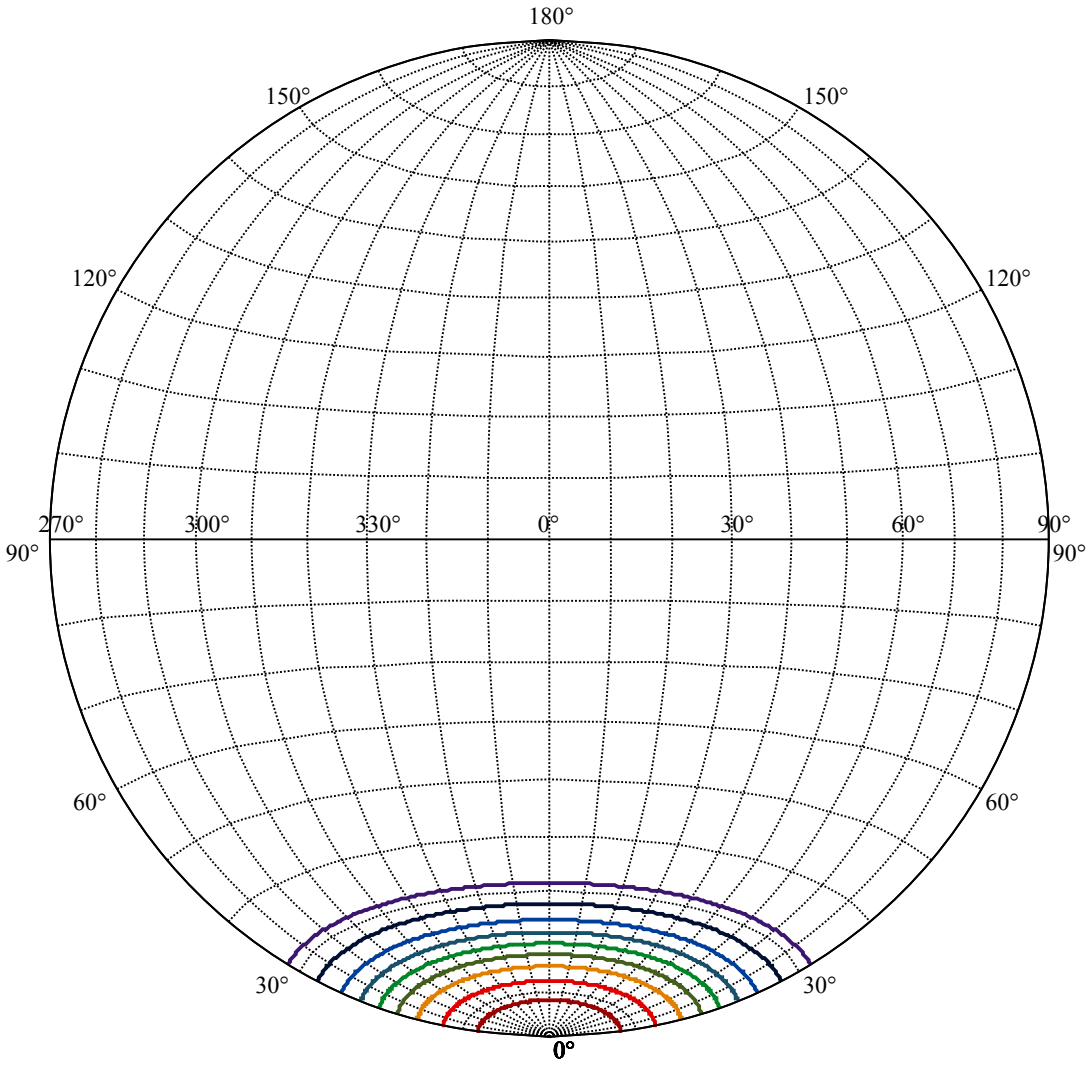


Equipment: GMS1980
Temperature(°C): 0.0

Date: 2023/10/16
Humidity(%): 0.0%

Operator: NT07
Distance(m): 7.44

ISO candela diagram on circular web



House [Unit:cd] Road

Imax:5172.52

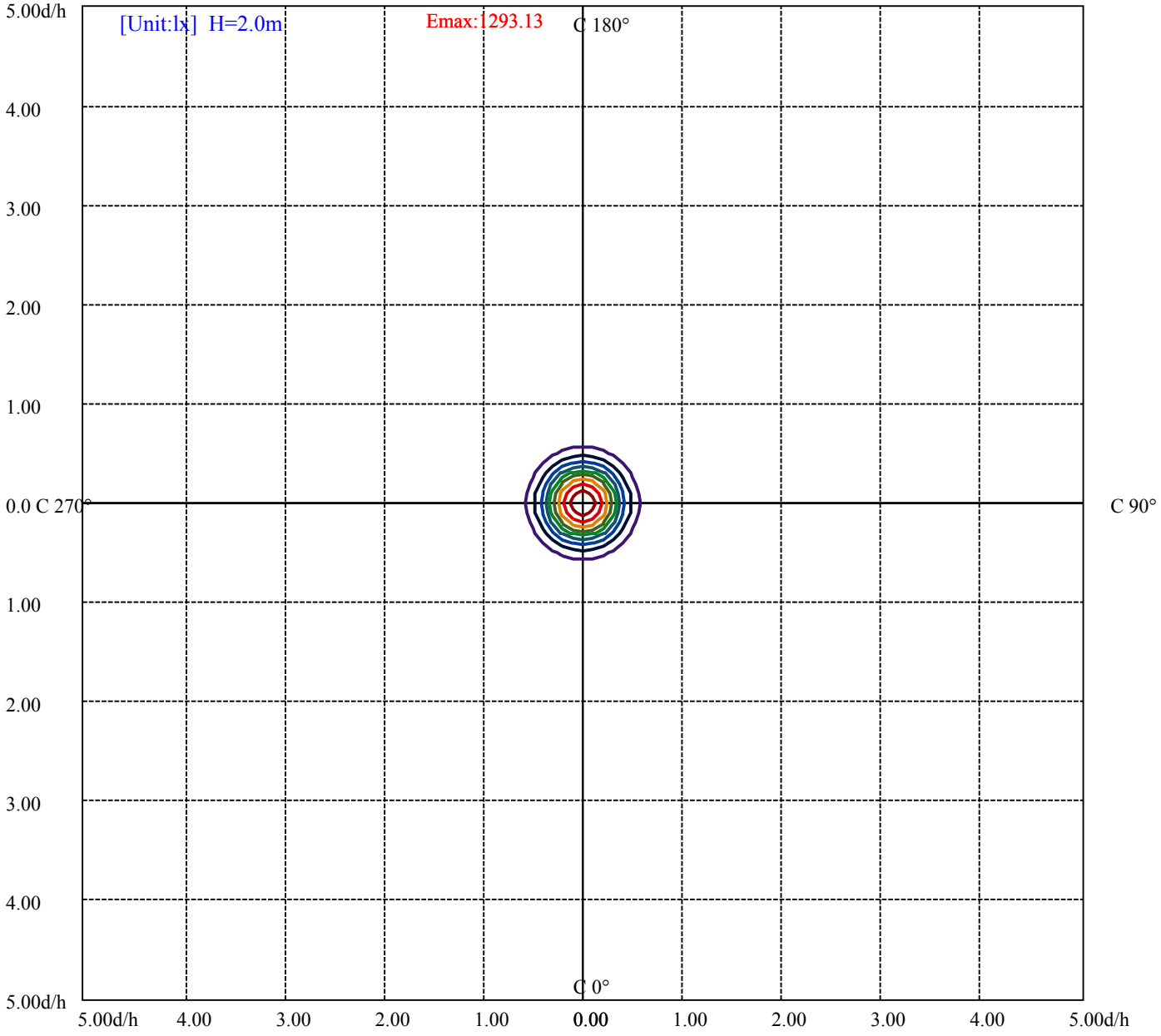
(10%Imax) 517.252
(20%Imax) 1034.5
(30%Imax) 1551.76
(40%Imax) 2069.01
(50%Imax) 2586.26
(60%Imax) 3103.51
(70%Imax) 3620.76
(80%Imax) 4138.01
(90%Imax) 4655.27

Equipment: GMS1980
Temperature(°C): 0.0

Date: 2023/10/16
Humidity(%): 0.0%

Operator: NT07
Distance(m): 7.44

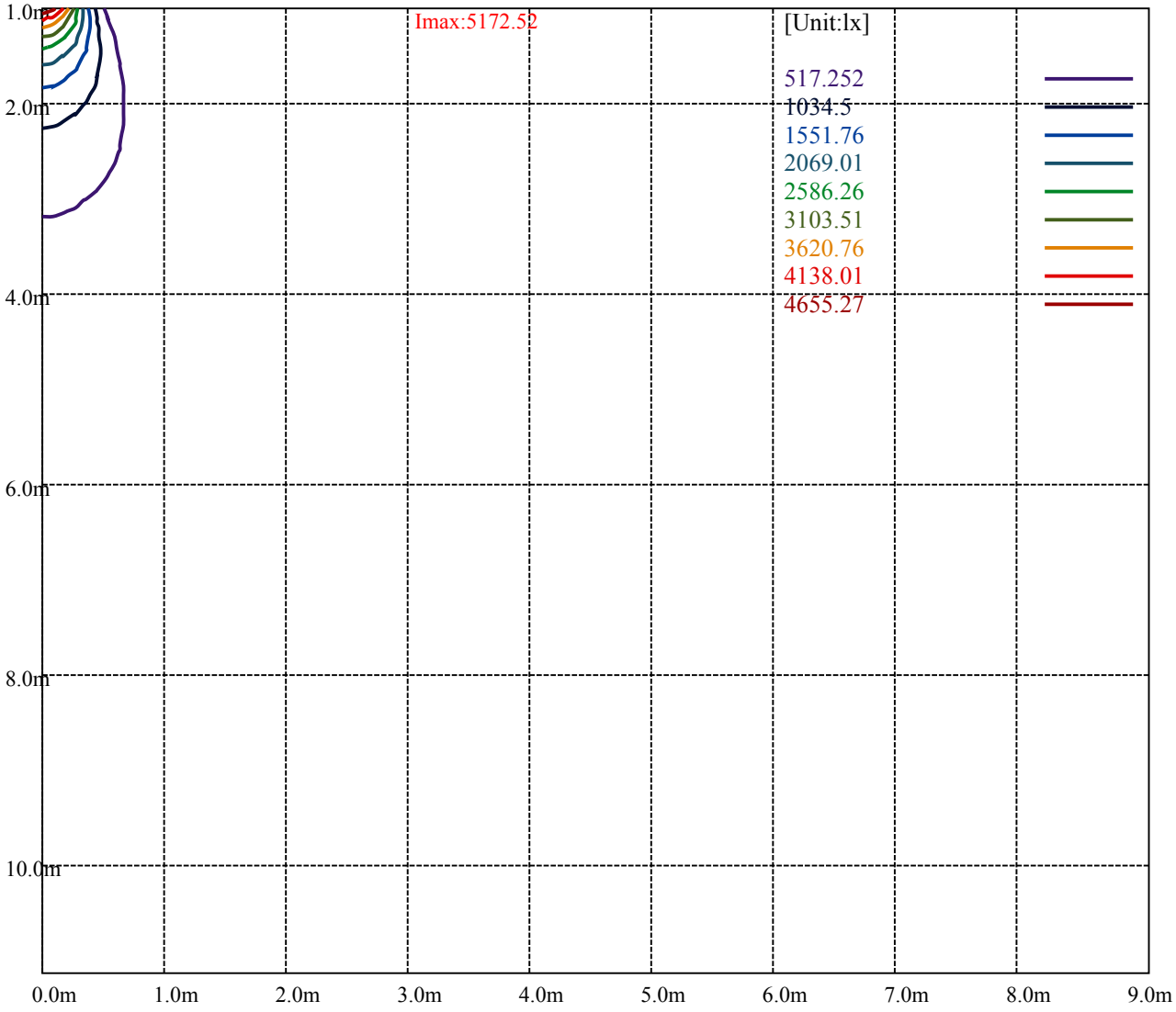
ISO illuminance diagram



(10%Emax) 129.313
(20%Emax) 258.625
(30%Emax) 387.9375
(40%Emax) 517.2525
(50%Emax) 646.565
(60%Emax) 775.8775
(70%Emax) 905.19
(80%Emax) 1034.502
(90%Emax) 1163.815

Equipment: GMS1980
Temperature(°C): 0.0
Date: 2023/10/16
Humidity(%): 0.0%
Operator: NT07
Distance(m): 7.44

Space ISO Lux diagram



Equipment: GMS1980
Temperature(°C): 0.0

Date: 2023/10/16
Humidity(%): 0.0%

Operator: NT07
Distance(m): 7.44

Luminance Limitting Curve(no luminous side)

Luminance Table

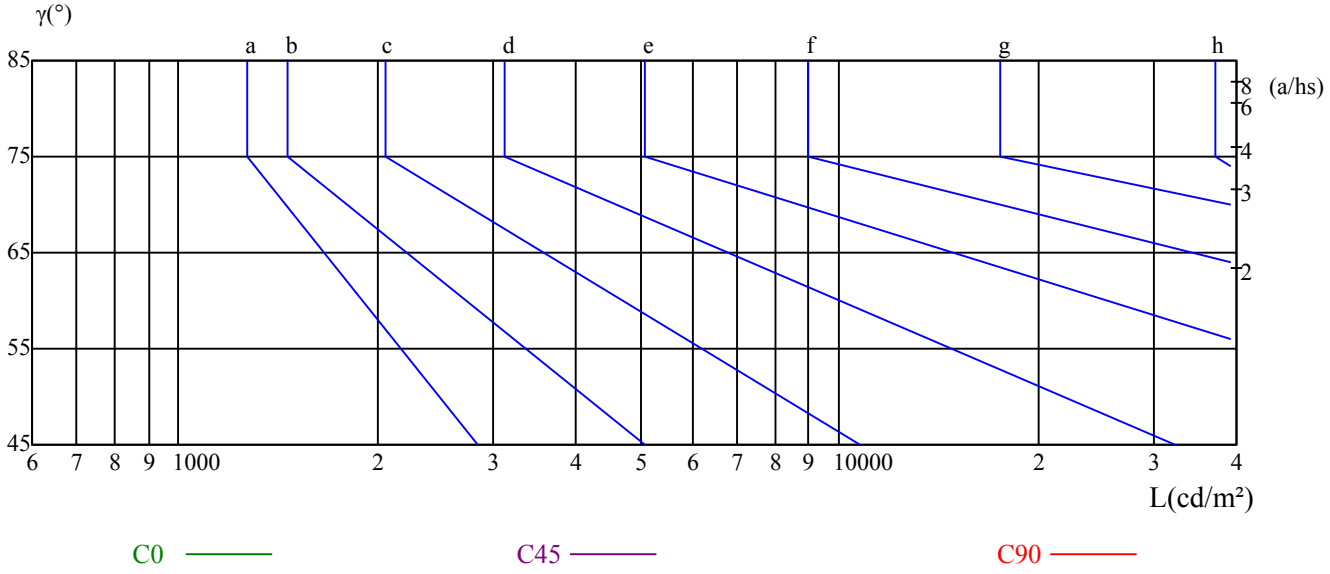
γ	45	50	55	60	65	70	75	80	85
C0	0	0	0	0	0	0	0	0	0
C45	0	0	0	0	0	0	0	0	0
C90	0	0	0	0	0	0	0	0	0

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 Limitting Curve

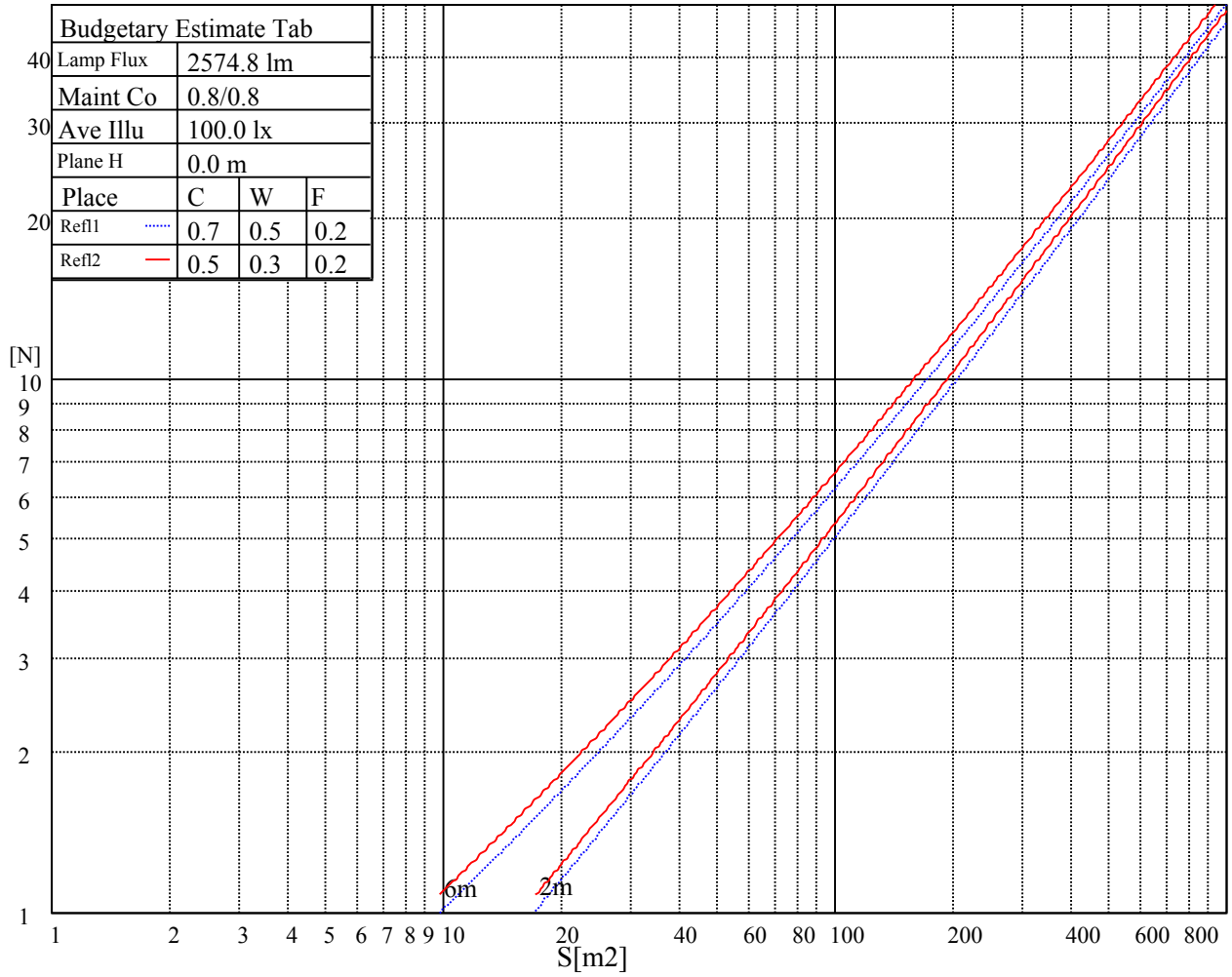


UGR Glare

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	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	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	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	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	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	非数字
4H	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	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	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	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	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	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	非数字
8H	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	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	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	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	非数字
12H	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	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	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	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

Budgetary Estimate Table

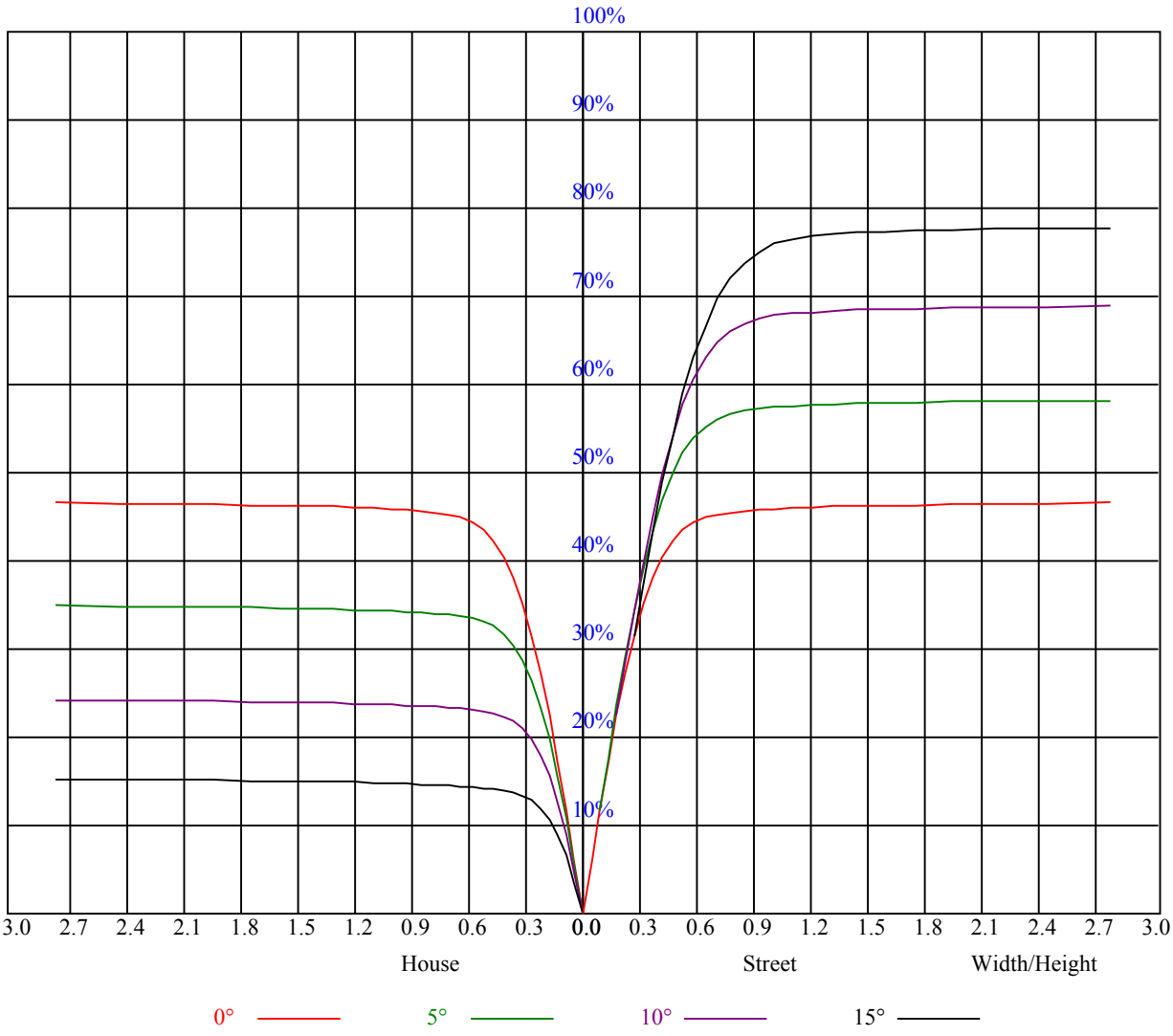


Equipment: GMS1980 Date: 2023/10/16 Operator: NT07
Temperature(°C): 0.0 Humidity(%): 0.0% Distance(m): 7.44

Utilization factor table for indoor luminaire

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	COEFFCIENTS OF UTILIZATION RHOFC=20 CU															
0	1.12	1.12	1.12	1.09	1.09	1.09	1.04	1.04	1.04	1.00	1.00	1.00	0.96	0.96	0.96	0.94
1	1.05	1.02	1.00	1.03	1.01	0.99	0.99	0.97	0.96	0.95	0.94	0.93	0.92	0.91	0.90	0.89
2	0.98	0.95	0.92	0.97	0.94	0.91	0.94	0.91	0.89	0.91	0.89	0.87	0.89	0.87	0.85	0.84
3	0.93	0.89	0.86	0.92	0.88	0.85	0.89	0.86	0.84	0.87	0.84	0.82	0.85	0.83	0.81	0.80
4	0.88	0.84	0.80	0.87	0.83	0.80	0.85	0.82	0.79	0.83	0.80	0.78	0.82	0.79	0.77	0.76
5	0.84	0.79	0.76	0.83	0.79	0.75	0.81	0.78	0.75	0.80	0.77	0.74	0.79	0.76	0.73	0.72
6	0.80	0.75	0.72	0.79	0.75	0.72	0.78	0.74	0.71	0.77	0.73	0.71	0.76	0.73	0.70	0.69
7	0.76	0.72	0.68	0.76	0.71	0.68	0.75	0.71	0.68	0.74	0.70	0.67	0.73	0.70	0.67	0.66
8	0.73	0.68	0.65	0.73	0.68	0.65	0.72	0.68	0.65	0.71	0.67	0.64	0.70	0.67	0.64	0.63
9	0.70	0.65	0.62	0.70	0.65	0.62	0.69	0.65	0.62	0.68	0.64	0.62	0.67	0.64	0.62	0.61
10	0.67	0.63	0.60	0.67	0.63	0.60	0.66	0.62	0.59	0.66	0.62	0.59	0.65	0.62	0.59	0.58

Coefficient Utilization Curve



Equipment: GMS1980	Date: 2023/10/16	Operator: NT07
Temperature(°C): 0.0	Humidity(%): 0.0%	Distance(m): 7.44

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	5163.38	5127.40	5070.94	5015.04	4940.31	4833.48	4744.36	4645.83	4512.98
45.0	5182.20	5172.79	5144.56	5093.08	5023.34	4948.06	4871.67	4782.00	4658.01
90.0	5162.28	5131.83	5082.57	5025.55	4951.38	4872.22	4753.77	4655.24	4546.19
135.0	5182.20	5162.28	5132.94	5089.21	5033.30	4959.68	4881.63	4765.39	4679.04
180.0	5163.38	5181.65	5169.47	5152.31	5124.08	5070.94	5004.52	4935.88	4858.94
225.0	5182.20	5170.03	5150.10	5122.42	5082.57	5005.63	4928.68	4827.39	4731.07
270.0	5162.28	5175.01	5178.88	5154.53	5118.55	5057.66	4994.00	4922.60	4820.19
315.0	5182.20	5168.37	5149.55	5089.21	5033.30	4969.65	4865.58	4782.55	4688.45
360.0	5163.38	5127.40	5070.94	5015.04	4940.31	4833.48	4744.36	4645.83	4512.98

C/γ(°)	9.0	10.0	11.0	12.0	13.0	14.0	15.0	16.0	17.0
0.0	4400.61	4284.92	4154.29	3971.07	3808.33	3626.21	3429.71	3168.44	2952.56
45.0	4560.03	4427.18	4314.26	4185.84	4010.37	3858.70	3687.66	3496.13	3242.06
90.0	4410.02	4290.46	4164.80	3980.48	3827.70	3656.66	3421.96	3223.24	3018.99
135.0	4567.78	4454.30	4306.51	4177.54	4026.97	3836.00	3667.18	3483.40	3227.67
180.0	4740.48	4643.61	4527.37	4377.92	4246.17	4101.70	3921.80	3751.31	3528.79
225.0	4623.13	4488.07	4366.85	4249.50	4072.92	3919.59	3759.62	3575.84	3321.77
270.0	4724.43	4630.33	4520.73	4381.24	4261.67	4112.77	3964.42	3762.38	3583.04
315.0	4585.49	4461.50	4358.54	4223.48	4076.24	3885.82	3704.82	3501.12	3238.74
360.0	4400.61	4284.92	4154.29	3971.07	3808.33	3626.21	3429.71	3168.44	2952.56

C/γ(°)	18.0	19.0	20.0	21.0	22.0	23.0	24.0	25.0	26.0
0.0	2729.49	2442.20	2219.13	1956.20	1759.69	1573.70	1280.33	1092.24	1055.70
45.0	3036.70	2814.18	2593.87	2308.25	2092.37	1888.66	1657.84	1482.92	1266.49
90.0	2811.96	2547.93	2335.92	2123.92	1926.31	1697.69	1523.33	1093.51	1093.51
135.0	3027.29	2823.59	2564.53	2354.19	2154.92	1964.50	1738.10	1563.74	1384.95
180.0	3326.20	3129.69	2912.15	2683.54	2397.92	2185.91	1992.73	1810.06	1593.08
225.0	3109.21	2891.67	2668.60	2379.65	2168.20	1921.32	1738.10	1559.31	1092.74
270.0	3373.25	3090.95	2874.51	2651.44	2350.87	2119.49	1878.70	1681.09	1512.81
315.0	3016.22	2725.61	2491.47	2261.75	2046.98	1796.78	1617.99	1448.05	1098.44
360.0	2729.49	2442.20	2219.13	1956.20	1759.69	1573.70	1280.33	1092.24	1055.70

C/γ(°)	27.0	28.0	29.0	30.0	31.0	32.0	33.0	34.0	35.0
0.0	916.82	790.50	645.81	535.66	427.88	329.52	243.06	164.40	129.14
45.0	1100.98	951.53	788.79	671.99	563.50	460.54	342.09	297.80	297.80
90.0	975.44	837.78	680.96	569.15	465.19	343.86	255.96	185.10	132.13
135.0	1209.48	1008.54	858.53	728.45	580.66	475.49	355.37	292.27	292.27
180.0	1421.48	1203.39	1039.54	891.19	724.58	604.46	493.75	391.35	279.54
225.0	1092.74	1014.47	871.99	711.90	595.77	487.28	386.59	275.00	204.70
270.0	1345.09	1129.77	982.53	849.12	725.69	588.41	489.33	394.12	300.02
315.0	1098.44	958.67	830.41	710.13	572.19	464.69	364.56	252.63	180.90
360.0	916.82	790.50	645.81	535.66	427.88	329.52	243.06	164.40	129.14

C/γ(°)	36.0	37.0	38.0	39.0	40.0	41.0	42.0	43.0	44.0
0.0	104.90	91.67	82.14	71.85	64.54	58.45	51.81	47.49	43.90
45.0	140.82	116.30	96.26	85.36	76.28	66.54	60.00	54.36	48.55
90.0	112.26	98.09	86.96	78.21	68.64	62.16	56.46	50.81	46.88
135.0	154.33	121.67	105.23	92.77	83.20	73.01	66.04	59.89	54.91
180.0	279.54	195.29	126.10	108.66	95.15	84.97	76.72	67.70	61.50
225.0	155.32	125.65	103.40	90.61	81.04	71.18	64.54	57.18	52.53
270.0	300.02	142.54	114.53	95.98	85.02	74.17	66.70	60.28	54.86
315.0	134.45	105.89	92.27	82.03	71.74	64.76	58.67	51.98	47.71
360.0	104.90	91.67	82.14	71.85	64.54	58.45	51.81	47.49	43.90

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	39.91	37.25	34.87	32.77	30.94	28.84	27.46	26.18	24.74
45.0	44.73	40.63	37.86	35.43	33.21	30.83	29.23	27.79	26.57
90.0	43.45	39.85	37.31	34.65	32.71	31.00	29.50	27.90	26.63
135.0	49.49	45.78	42.46	38.97	36.42	33.77	31.88	30.28	28.56
180.0	56.24	50.87	47.11	42.95	40.02	37.42	34.71	32.66	30.83
225.0	48.43	44.95	41.07	38.36	35.98	33.88	31.55	29.89	28.40
270.0	49.26	45.56	42.29	39.47	36.42	34.15	32.27	30.50	28.56
315.0	44.12	41.13	37.75	35.32	33.27	31.44	29.34	27.84	26.24
360.0	39.91	37.25	34.87	32.77	30.94	28.84	27.46	26.18	24.74

C/γ(°)	54.0	55.0	56.0	57.0	58.0	59.0	60.0	61.0	62.0
0.0	23.75	22.64	21.86	21.15	20.31	19.76	19.26	18.76	18.21
45.0	25.13	24.08	23.19	22.25	21.53	20.87	20.20	19.65	19.15
90.0	25.52	24.52	23.47	22.64	21.98	21.15	20.54	19.98	19.32
135.0	27.23	26.07	25.02	23.91	23.08	22.36	21.64	20.87	20.31
180.0	29.23	27.46	26.24	25.19	24.19	23.08	22.31	21.59	20.76
225.0	27.12	25.63	24.63	23.47	22.69	21.86	21.09	20.48	19.87
270.0	27.29	25.79	24.69	23.75	22.75	21.98	21.26	20.48	19.93
315.0	25.08	24.02	22.97	22.14	21.37	20.70	19.98	19.43	18.93
360.0	23.75	22.64	21.86	21.15	20.31	19.76	19.26	18.76	18.21

C/γ(°)	63.0	64.0	65.0	66.0	67.0	68.0	69.0	70.0	71.0
0.0	17.77	17.38	16.99	16.55	16.22	15.89	15.44	15.17	14.78
45.0	18.54	18.16	17.71	17.33	16.83	16.50	16.11	15.78	15.39
90.0	18.88	18.43	17.88	17.44	17.05	16.66	16.16	15.78	15.44
135.0	19.76	19.10	18.65	18.16	17.60	17.16	16.77	16.27	15.83
180.0	20.15	19.60	18.93	18.49	17.99	17.44	17.05	16.66	16.22
225.0	19.21	18.71	18.27	17.77	17.38	16.88	16.55	16.16	15.72
270.0	19.37	18.88	18.38	17.88	17.44	16.99	16.55	16.16	15.83
315.0	18.43	17.88	17.49	17.05	16.61	16.27	15.83	15.50	15.22
360.0	17.77	17.38	16.99	16.55	16.22	15.89	15.44	15.17	14.78

C/γ(°)	72.0	73.0	74.0	75.0	76.0	77.0	78.0	79.0	80.0
0.0	14.50	14.23	13.95	13.62	13.34	13.06	12.79	12.45	12.18
45.0	15.06	14.78	14.45	14.17	13.78	13.45	13.17	12.84	12.51
90.0	15.11	14.72	14.39	14.12	13.62	13.28	12.90	12.57	12.29
135.0	15.50	15.11	14.67	14.34	14.00	13.62	13.23	12.95	12.62
180.0	15.78	15.44	15.11	14.72	14.28	14.00	13.62	13.17	12.95
225.0	15.39	15.06	14.67	14.34	13.95	13.62	13.28	12.95	12.57
270.0	15.44	15.11	14.72	14.45	14.17	13.89	13.51	13.23	12.95
315.0	14.89	14.50	14.28	14.00	13.73	13.34	13.06	12.79	12.45
360.0	14.50	14.23	13.95	13.62	13.34	13.06	12.79	12.45	12.18

C/γ(°)	81.0	82.0	83.0	84.0	85.0	86.0	87.0	88.0	89.0
0.0	11.96	11.68	11.40	11.18	10.96	10.79	10.63	10.41	10.24
45.0	12.23	11.96	11.62	11.40	11.18	10.96	10.74	10.52	10.24
90.0	12.01	11.73	11.46	11.29	11.02	10.85	10.68	10.35	10.52
135.0	12.23	12.01	11.62	11.40	11.13	11.07	10.79	10.68	10.52
180.0	12.57	12.29	12.01	11.68	11.40	11.24	11.02	10.85	10.68
225.0	12.29	12.07	11.79	11.46	11.29	11.02	10.85	10.68	10.46
270.0	12.68	12.29	12.01	11.68	11.40	11.24	10.96	10.74	10.52
315.0	12.12	11.90	11.62	11.35	11.13	10.90	10.74	10.57	10.41
360.0	11.96	11.68	11.40	11.18	10.96	10.79	10.63	10.41	10.24

Intensity data(cd)

C/γ(°)	90.0
0.0	10.24
45.0	10.24
90.0	10.52
135.0	10.68
180.0	10.52
225.0	10.30
270.0	10.30
315.0	10.19
360.0	10.24