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NATA

Client:
LumCAT: 2-2646-L
Luminaire: 92.70.412.00
Report No: 20231013-B003
Ballast type: AC

Test No: 20231013-C003	Voltage(V): 34.030
LampCAT: LUMINUS CXM-14-AC40	Current(A): 0.530
Lamp flux(lm): 2320.0	Power (W): 18.030
Number of Lamps: 1	PF: 0.000
Length(mm): 0	Width(mm): 0
Phm Type: C	Height(mm): 0

Photometric Results

Lumens(lm): 2118.49, Efficiency(%): 91.32% , Luminous Efficacy(lm/W): 117.50
Central intensity(cd): 3673.403, Maximum intensity(cd): 3673.403
Angle of maximum intensity: C=0.0 γ=0.0
Beam Angle(50%Imax): [C0/180]Total=46.8
[C90/270]Total=46.8
Field angle(10%Imax): [C0/180]Total=68.2
[C90/270]Total=68.2
Maximum s/h(1/2): C0_180=0.74 C90_270=0.74
Maximum s/h(1/4): C0_180=0.71 C90_270=0.71
Up flux rate of lamp(%): 0.00%
Down flux rate of lamp(%): 91.32%
Up flux rate of LUM(%): - -
Down flux rate of LUM(%): 100.00%
CIE Type : Direct lighting
Output flux ratio in π solid angle : 98.124%

Zonal flux distribution table

γ(°)	Average I(cd)	Zonal F(lm)	Sum F(lm)	Eff Flux(%)	Eff Sum(%)
0.0	3673.403	0.000	0	0.00%	0.00%
1.0	3662.609	3.510	3.51	0.15%	0.17%
2.0	3642.890	10.486	13.996	0.45%	0.66%
3.0	3608.294	17.342	31.338	0.75%	1.48%
4.0	3564.149	24.008	55.347	1.03%	2.61%
5.0	3508.242	30.425	85.772	1.31%	4.05%
6.0	3452.127	36.579	122.35	1.58%	5.78%
7.0	3393.937	42.493	164.844	1.83%	7.78%
8.0	3329.242	48.117	212.96	2.07%	10.05%
9.0	3269.806	53.482	266.442	2.31%	12.58%
10.0	3200.822	58.557	324.999	2.52%	15.34%
11.0	3137.926	63.337	388.336	2.73%	18.33%
12.0	3064.652	67.803	456.139	2.92%	21.53%
13.0	2991.378	71.870	528.009	3.10%	24.92%
14.0	2912.153	75.565	603.573	3.26%	28.49%
15.0	2827.185	78.792	682.366	3.40%	32.21%
16.0	2732.046	81.458	763.824	3.51%	36.06%
17.0	2632.686	83.543	847.367	3.60%	40.00%
18.0	2524.678	85.034	932.401	3.67%	44.01%
19.0	2405.529	85.776	1018.176	3.70%	48.06%
20.0	2286.588	85.879	1104.055	3.70%	52.12%
21.0	2156.576	85.318	1189.373	3.68%	56.14%
22.0	2018.677	83.903	1273.276	3.62%	60.10%
23.0	1890.049	82.016	1355.292	3.54%	63.97%
24.0	1743.984	79.453	1434.745	3.42%	67.72%
25.0	1583.182	75.652	1510.397	3.26%	71.30%
26.0	1411.593	70.692	1581.089	3.05%	74.63%
27.0	1233.749	64.719	1645.808	2.79%	77.69%
28.0	1120.246	59.598	1705.406	2.57%	80.50%
29.0	972.556	54.754	1760.16	2.36%	83.09%
30.0	832.165	48.727	1808.887	2.10%	85.39%
31.0	688.433	42.316	1851.203	1.82%	87.38%
32.0	571.664	36.100	1887.304	1.56%	89.09%
33.0	461.068	30.425	1917.728	1.31%	90.52%
34.0	372.108	25.214	1942.943	1.09%	91.71%
35.0	297.906	20.808	1963.751	0.90%	92.70%
36.0	249.506	17.430	1981.18	0.75%	93.52%
37.0	191.427	14.381	1995.561	0.62%	94.20%

Zonal flux distribution table

γ(°)	Average I(cd)	Zonal F(lm)	Sum F(lm)	Eff Flux(%)	Eff Sum(%)
38.0	165.763	11.923	2007.484	0.51%	94.76%
39.0	112.029	9.482	2016.965	0.41%	95.21%
40.0	90.607	7.067	2024.033	0.30%	95.54%
41.0	73.406	5.840	2029.873	0.25%	95.82%
42.0	60.854	4.878	2034.751	0.21%	96.05%
43.0	52.192	4.188	2038.939	0.18%	96.25%
44.0	46.068	3.709	2042.647	0.16%	96.42%
45.0	41.079	3.349	2045.996	0.14%	96.58%
46.0	37.149	3.059	2049.056	0.13%	96.72%
47.0	34.125	2.835	2051.89	0.12%	96.86%
48.0	31.365	2.647	2054.538	0.11%	96.98%
49.0	29.241	2.489	2057.027	0.11%	97.10%
50.0	27.220	2.354	2059.381	0.10%	97.21%
51.0	25.726	2.240	2061.621	0.10%	97.32%
52.0	24.376	2.150	2063.771	0.09%	97.42%
53.0	23.159	2.068	2065.838	0.09%	97.51%
54.0	22.114	1.995	2067.834	0.09%	97.61%
55.0	21.180	1.933	2069.766	0.08%	97.70%
56.0	20.432	1.880	2071.647	0.08%	97.79%
57.0	19.706	1.835	2073.482	0.08%	97.88%
58.0	19.076	1.793	2075.275	0.08%	97.96%
59.0	18.495	1.756	2077.032	0.08%	98.04%
60.0	17.948	1.722	2078.754	0.07%	98.12%
61.0	17.492	1.691	2080.445	0.07%	98.20%
62.0	17.028	1.663	2082.108	0.07%	98.28%
63.0	16.620	1.636	2083.745	0.07%	98.36%
64.0	16.205	1.611	2085.355	0.07%	98.44%
65.0	15.859	1.587	2086.942	0.07%	98.51%
66.0	15.478	1.564	2088.506	0.07%	98.58%
67.0	15.125	1.539	2090.045	0.07%	98.66%
68.0	14.793	1.516	2091.56	0.07%	98.73%
69.0	14.454	1.492	2093.052	0.06%	98.80%
70.0	14.143	1.469	2094.521	0.06%	98.87%
71.0	13.797	1.444	2095.965	0.06%	98.94%
72.0	13.458	1.417	2097.382	0.06%	99.00%
73.0	13.181	1.393	2098.775	0.06%	99.07%
74.0	12.877	1.370	2100.145	0.06%	99.13%
75.0	12.565	1.344	2101.489	0.06%	99.20%

Zonal flux distribution table

γ(°)	Average I(cd)	Zonal F(lm)	Sum F(lm)	Eff Flux(%)	Eff Sum(%)
76.0	12.247	1.317	2102.806	0.06%	99.26%
77.0	11.943	1.290	2104.096	0.06%	99.32%
78.0	11.624	1.262	2105.358	0.05%	99.38%
79.0	11.334	1.234	2106.591	0.05%	99.44%
80.0	11.043	1.206	2107.798	0.05%	99.50%
81.0	10.759	1.179	2108.977	0.05%	99.55%
82.0	10.483	1.152	2110.129	0.05%	99.61%
83.0	10.199	1.124	2111.253	0.05%	99.66%
84.0	9.964	1.098	2112.351	0.05%	99.71%
85.0	9.721	1.074	2113.426	0.05%	99.76%
86.0	9.507	1.051	2114.477	0.05%	99.81%
87.0	9.313	1.030	2115.507	0.04%	99.86%
88.0	9.133	1.010	2116.517	0.04%	99.91%
89.0	8.953	0.991	2117.509	0.04%	99.95%
90.0	8.891	0.978	2118.487	0.04%	100.00%

Zonal flux distribution table

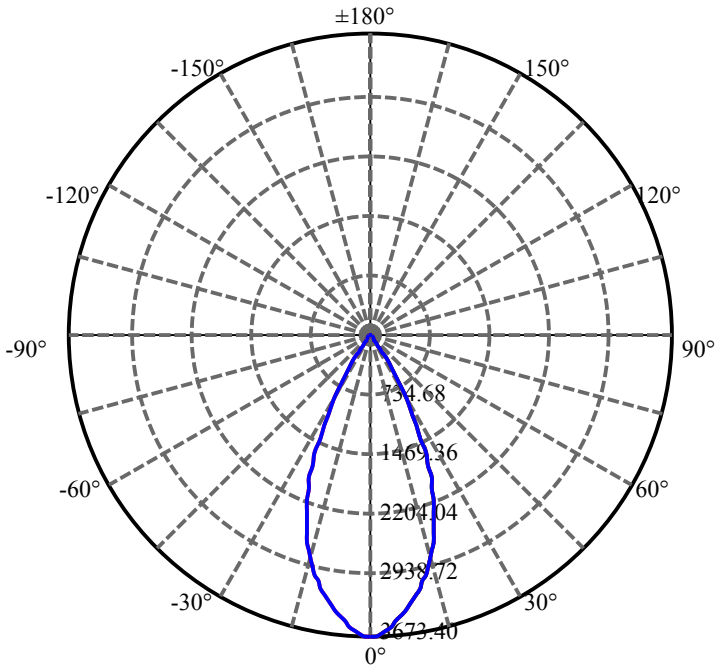
ZONAL LUMEN SUMMARY

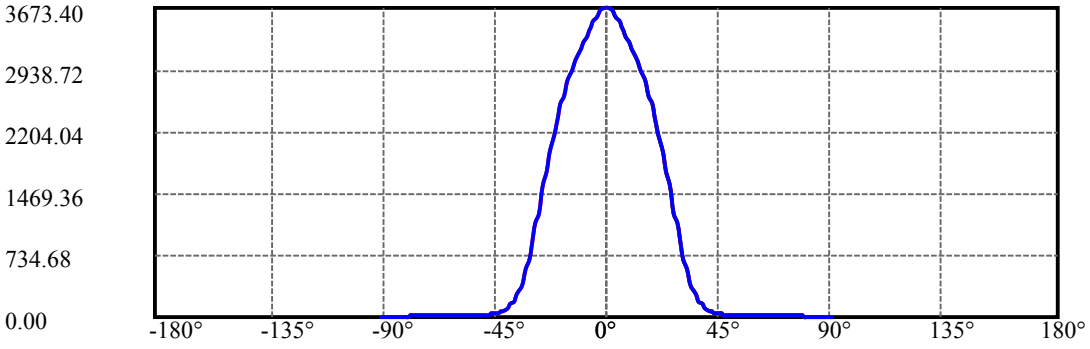
Zone	Lumens	%Lamp	%Fixt
0-30	1808.89	77.97%	85.39%
0-40	2024.03	87.24%	95.54%
0-60	2078.75	89.60%	98.12%
0-90	2117.51	91.27%	99.95%
0-120	2117.51	91.27%	99.95%
0-180	2118.49	91.32%	100.00%
60-90	38.75	1.67%	1.83%
90-120	0.00	0.00%	0.00%
90-130	0.00	0.00%	0.00%
90-150	0.00	0.00%	0.00%
90-180	0.00	0.00%	0.00%
0-27.82	1694.79	73.05%	80.00%

ZONAL LUMEN SUMMARY

0-10	325.00
10-20	779.06
20-30	704.83
30-40	215.15
40-50	35.35
50-60	19.37
60-70	15.77
70-80	13.28
80-90	9.71
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):

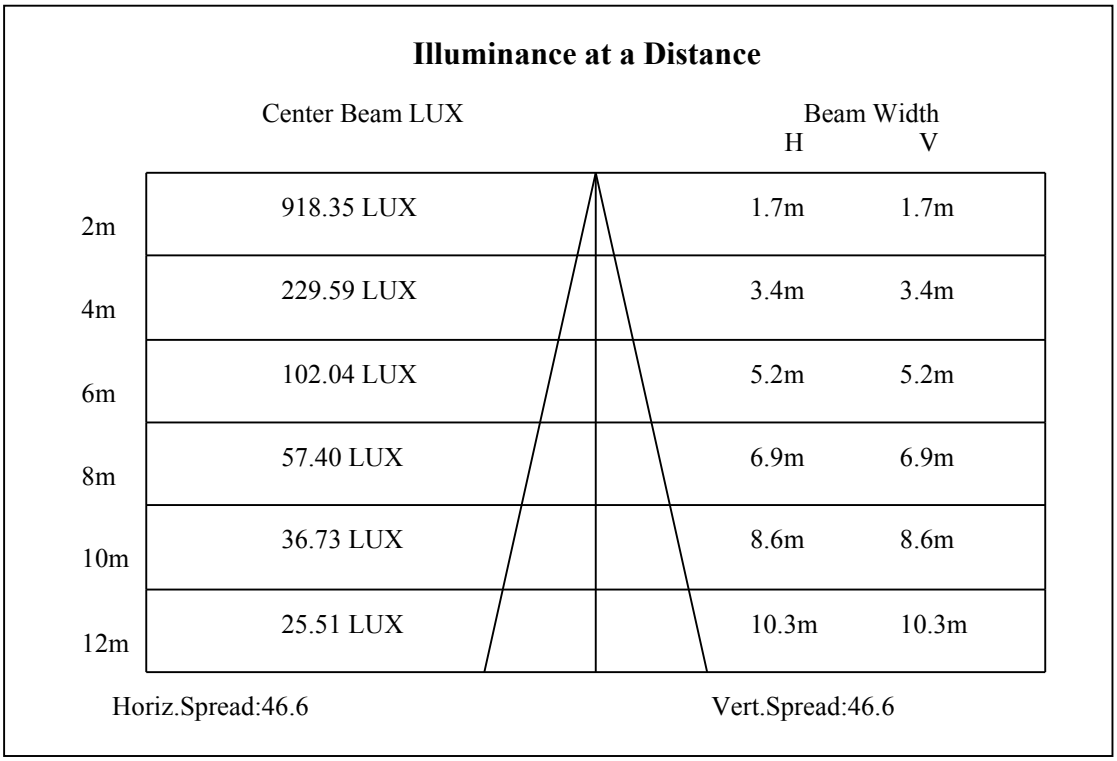
C0/C180:

C90/C270:

Field angle(10%Imax):C0/180Left:34.1 Right:34.1
:C90/270Left:34.1 Right:34.1

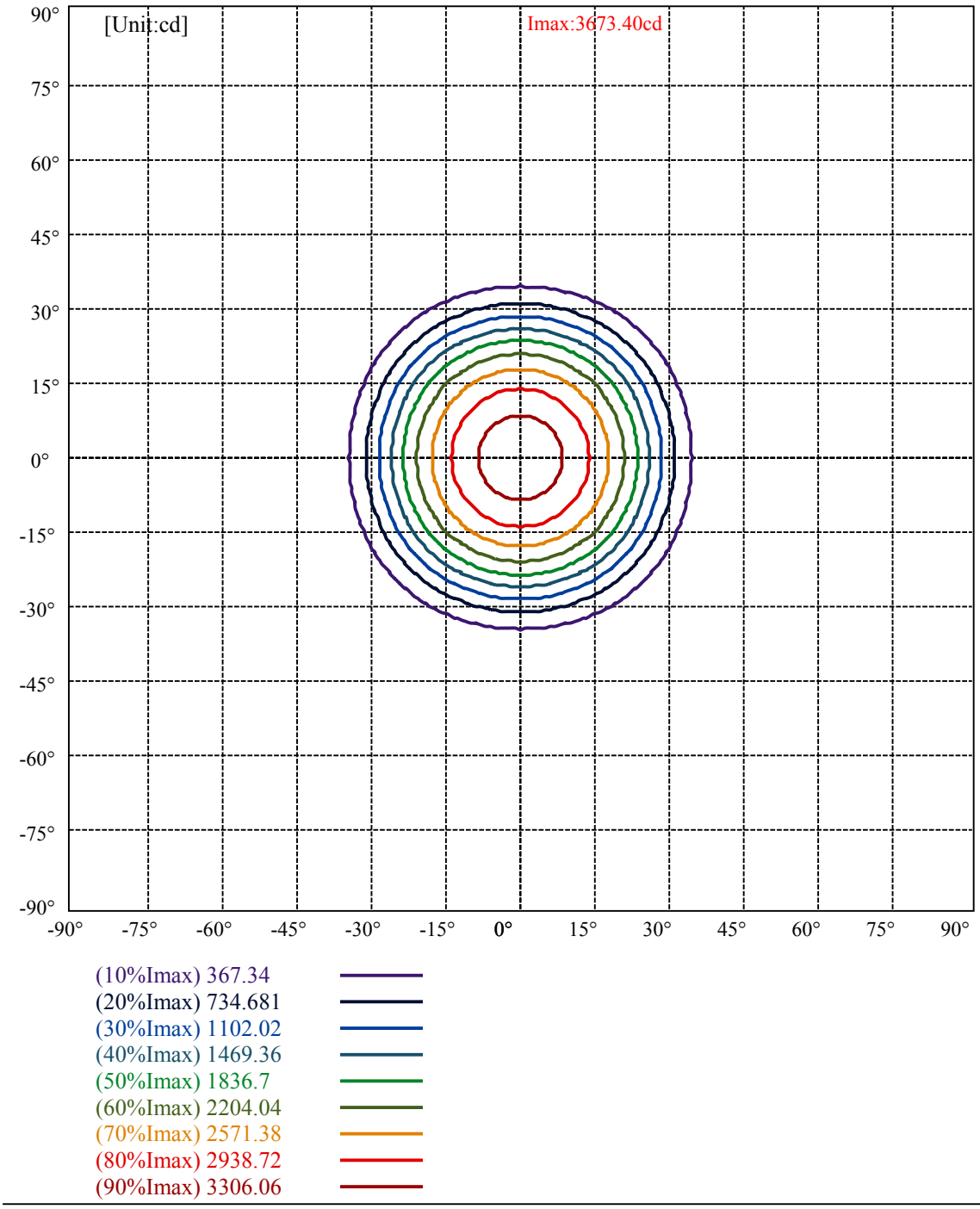
Beam Angle(50%Imax):C0/180Left:23.4 Right:23.4
:C90/270Left:23.4 Right:23.4

Lux distance Curve



Equipment: GMS1980 Date: 2023/10/13 Operator: NT07
Temperature(°C): 0.0 Humidity(%): 0.0% Distance(m): 7.44

ISO-Intensity(V-H)

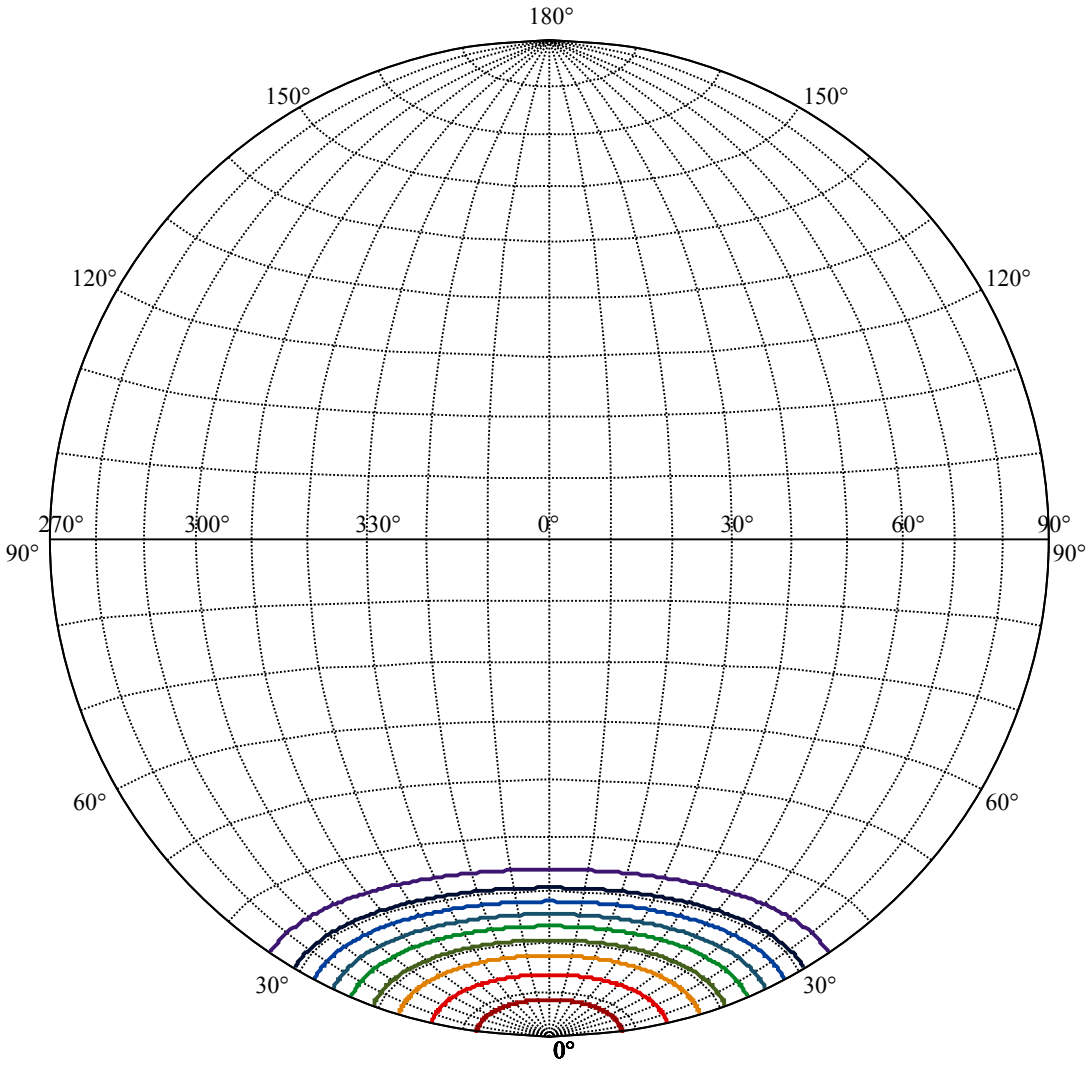


Equipment: GMS1980
Temperature(°C): 0.0

Date: 2023/10/13
Humidity(%): 0.0%

Operator: NT07
Distance(m): 7.44

ISO candela diagram on circular web



House [Unit:cd] Road

Imax:3673.40

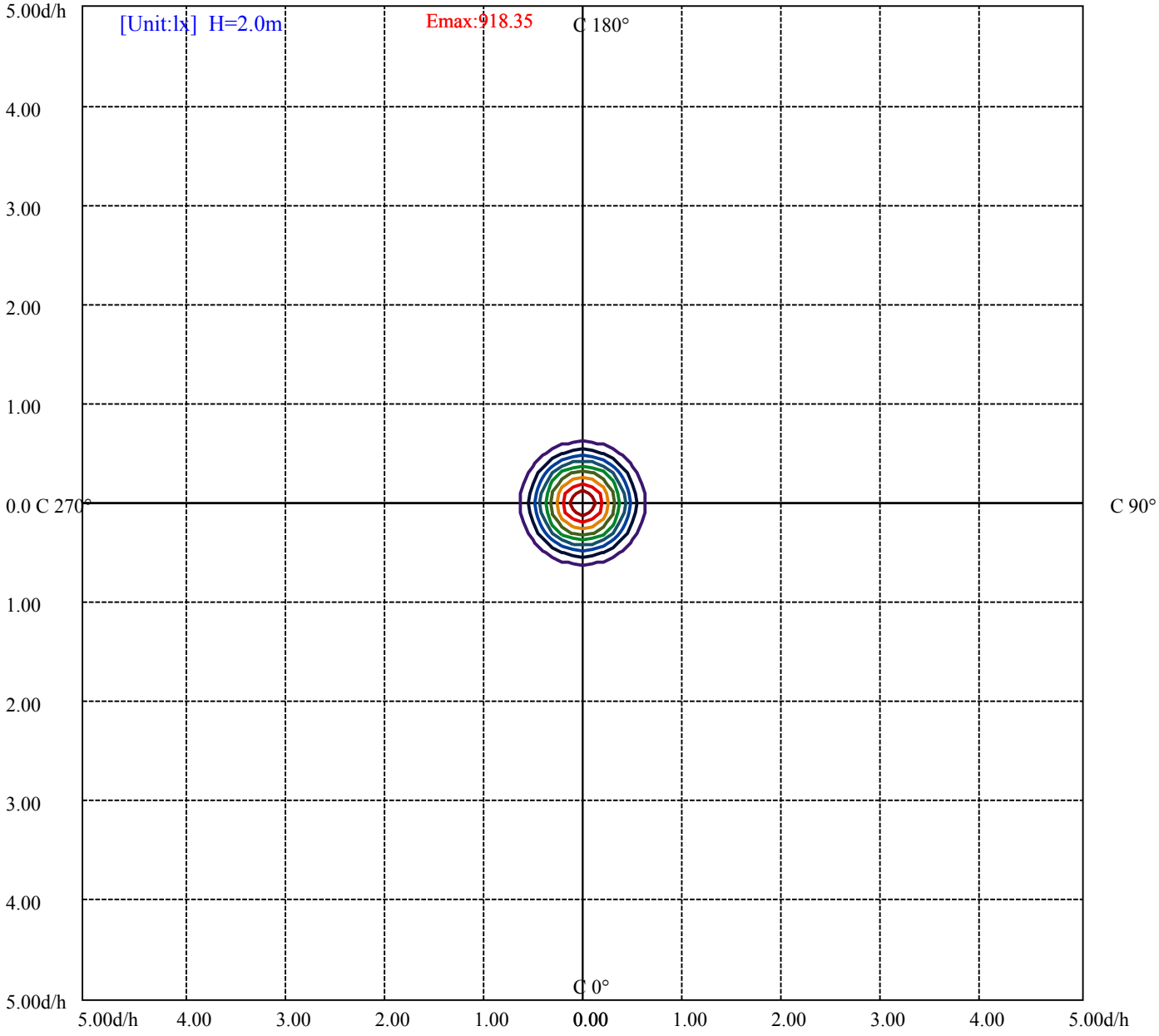
(10%Imax) 367.34
(20%Imax) 734.681
(30%Imax) 1102.02
(40%Imax) 1469.36
(50%Imax) 1836.7
(60%Imax) 2204.04
(70%Imax) 2571.38
(80%Imax) 2938.72
(90%Imax) 3306.06

Equipment: GMS1980
Temperature(°C): 0.0

Date: 2023/10/13
Humidity(%): 0.0%

Operator: NT07
Distance(m): 7.44

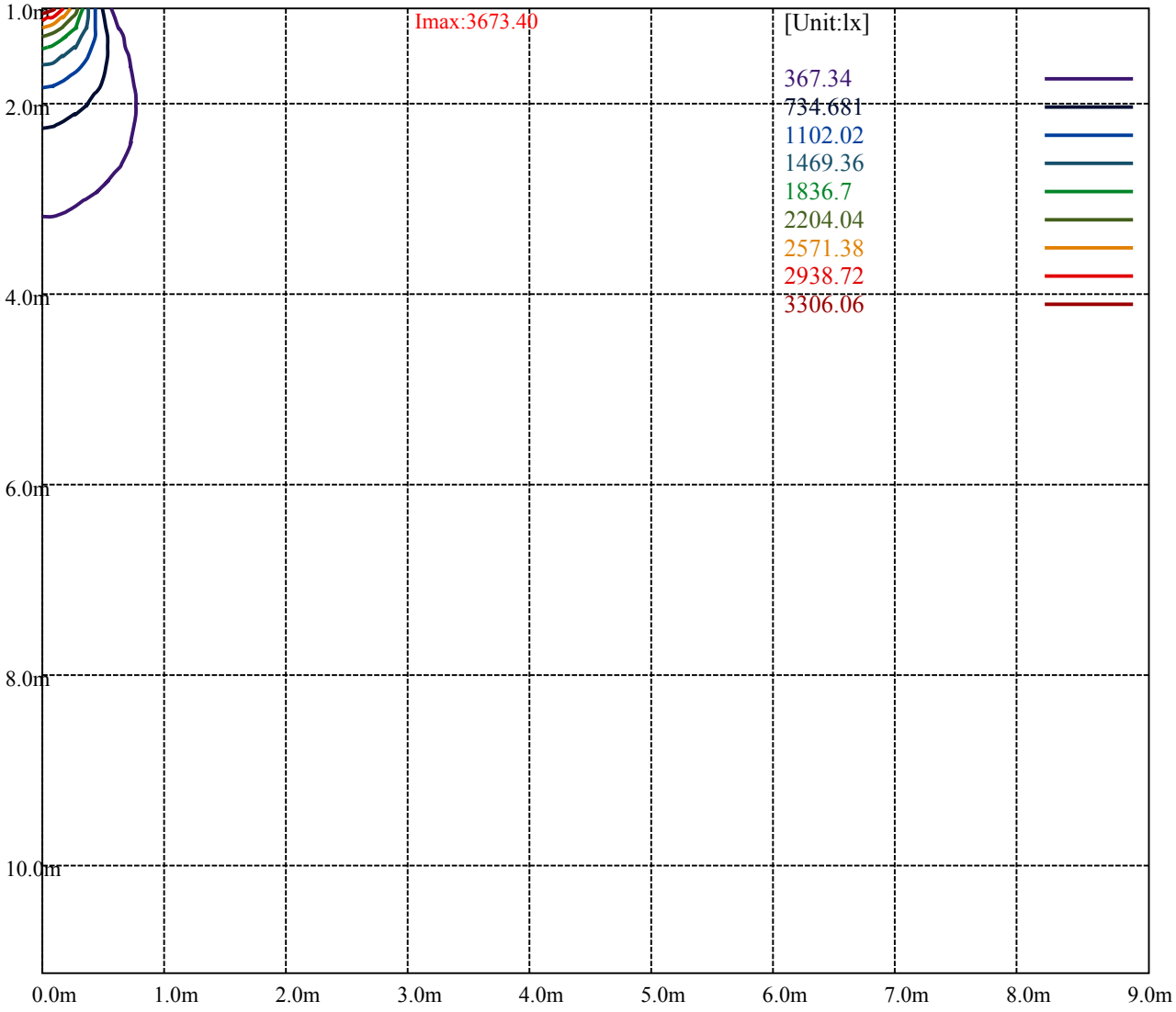
ISO illuminance diagram



(10%Emax) 91.835
(20%Emax) 183.67
(30%Emax) 275.505
(40%Emax) 367.34
(50%Emax) 459.175
(60%Emax) 551.01
(70%Emax) 642.845
(80%Emax) 734.68
(90%Emax) 826.515

Equipment: GMS1980
Temperature(°C): 0.0
Date: 2023/10/13
Humidity(%): 0.0%
Operator: NT07
Distance(m): 7.44

Space ISO Lux diagram



Equipment: GMS1980
Temperature(°C): 0.0

Date: 2023/10/13
Humidity(%): 0.0%

Operator: NT07
Distance(m): 7.44

Luminance Limitting Curve(no luminous side)

Luminance Table

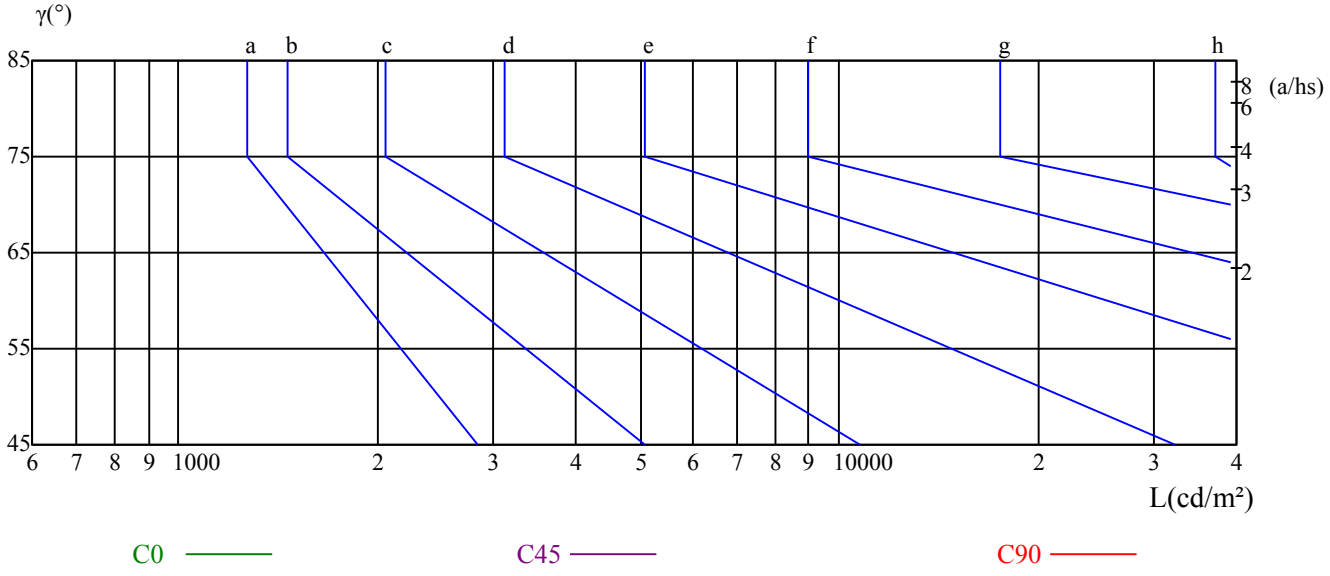
γ	45	50	55	60	65	70	75	80	85
C0	0	0	0	0	0	0	0	0	0
C45	0	0	0	0	0	0	0	0	0
C90	0	0	0	0	0	0	0	0	0

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

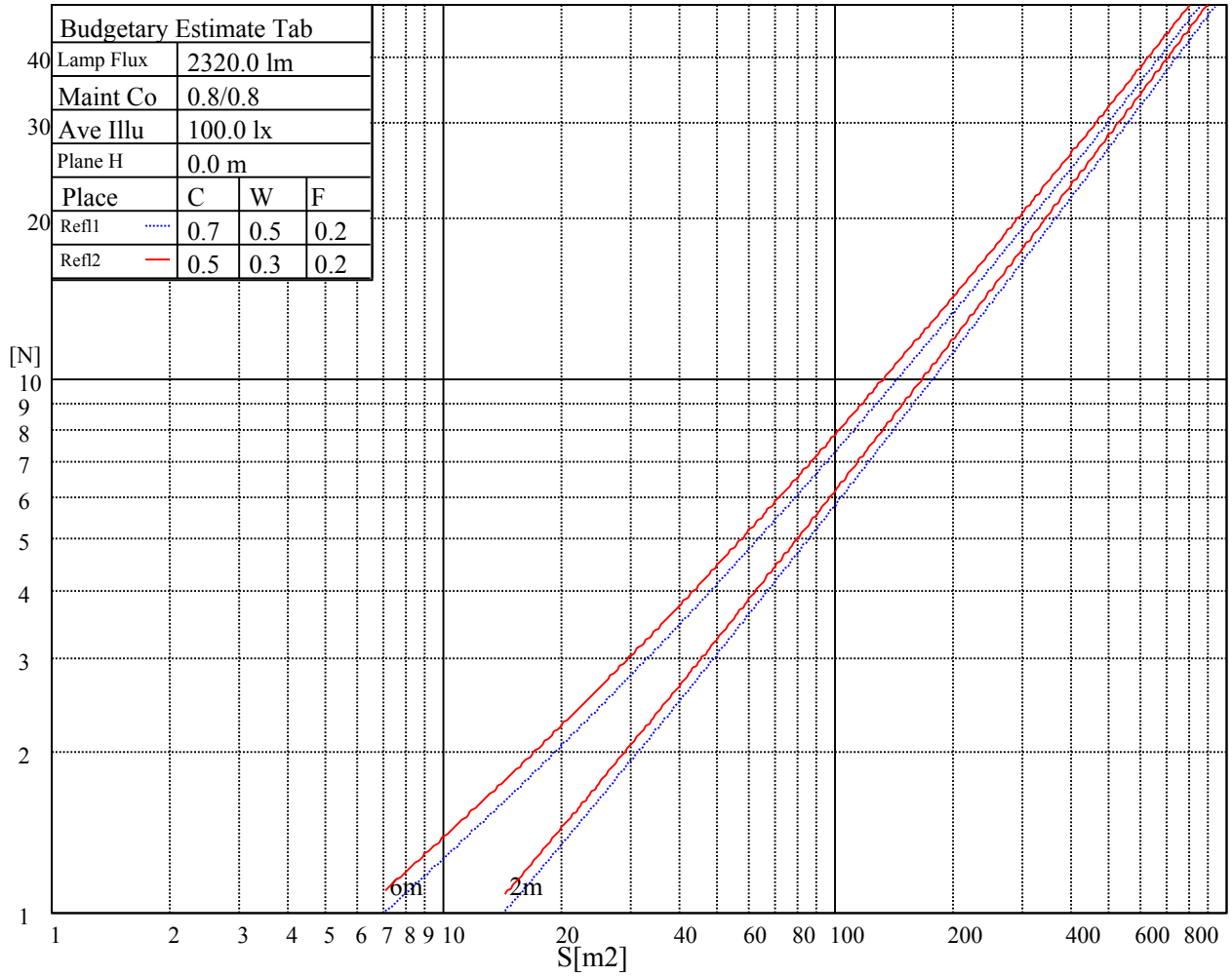
Luminance Limitting Curve



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

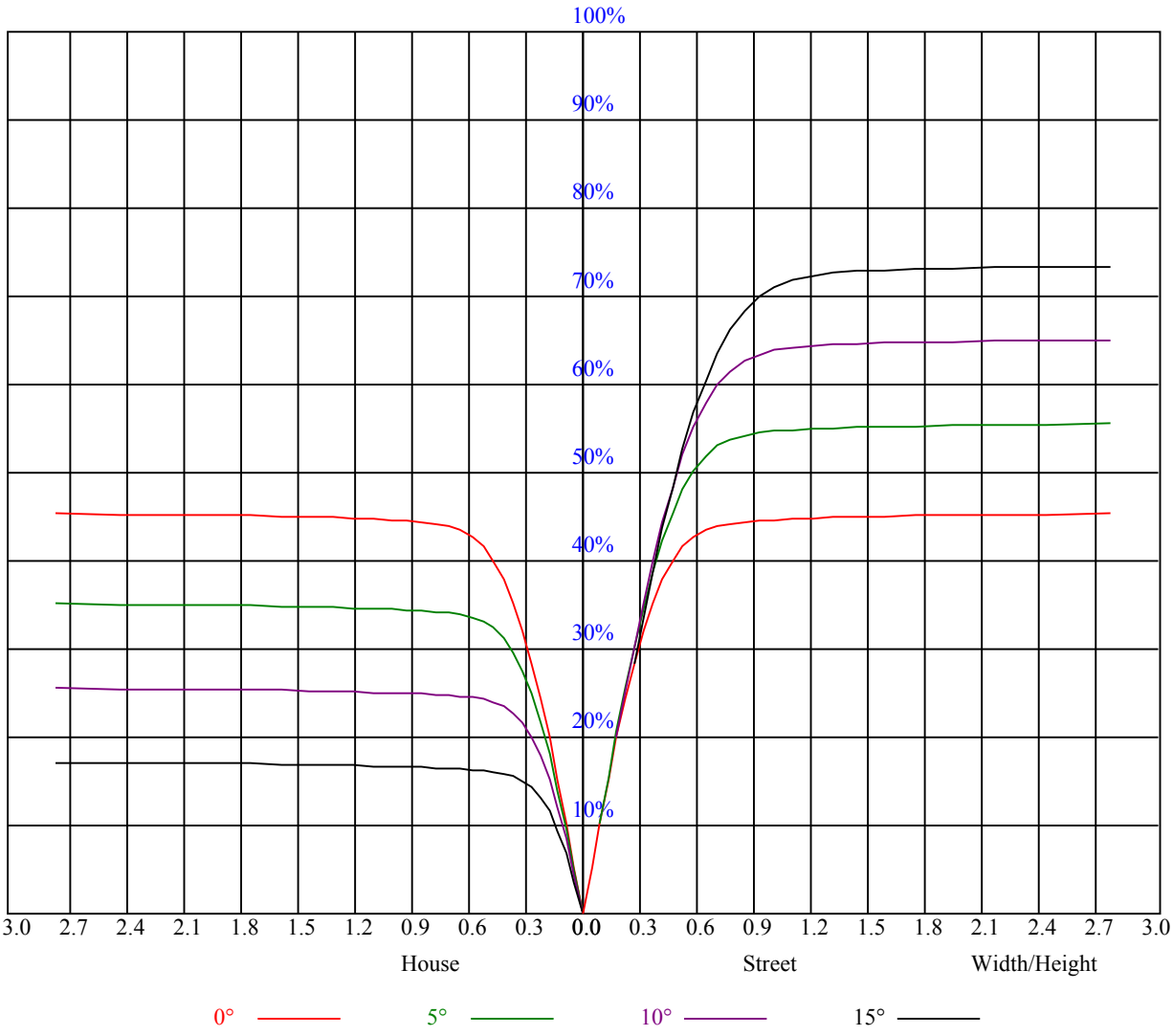


Equipment: GMS1980 Date: 2023/10/13 Operator: NT07
Temperature(°C): 0.0 Humidity(%): 0.0% Distance(m): 7.44

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	1.09	1.09	1.09	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	0.98	0.96	0.96	0.94	0.93	0.92	0.91	0.90	0.89	0.88	0.87	0.86
2	0.95	0.92	0.89	0.94	0.90	0.88	0.91	0.88	0.86	0.88	0.86	0.84	0.85	0.84	0.82	0.81
3	0.90	0.85	0.82	0.88	0.84	0.81	0.86	0.83	0.80	0.84	0.81	0.79	0.82	0.80	0.78	0.76
4	0.85	0.80	0.76	0.84	0.79	0.76	0.82	0.78	0.75	0.80	0.77	0.74	0.78	0.76	0.73	0.72
5	0.80	0.75	0.72	0.79	0.75	0.71	0.78	0.74	0.71	0.76	0.73	0.70	0.75	0.72	0.70	0.68
6	0.76	0.71	0.68	0.75	0.71	0.67	0.74	0.70	0.67	0.73	0.69	0.66	0.72	0.68	0.66	0.65
7	0.72	0.67	0.64	0.72	0.67	0.64	0.71	0.66	0.63	0.69	0.66	0.63	0.69	0.65	0.63	0.62
8	0.69	0.64	0.61	0.68	0.64	0.60	0.67	0.63	0.60	0.66	0.63	0.60	0.66	0.62	0.60	0.59
9	0.66	0.61	0.58	0.65	0.61	0.57	0.64	0.60	0.57	0.64	0.60	0.57	0.63	0.59	0.57	0.56
10	0.63	0.58	0.55	0.62	0.58	0.55	0.62	0.58	0.55	0.61	0.57	0.54	0.60	0.57	0.54	0.53

Coefficient Utilization Curve



Equipment: GMS1980	Date: 2023/10/13	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	3666.07	3657.77	3631.75	3580.27	3534.88	3458.49	3401.48	3347.23	3292.43
45.0	3683.78	3662.75	3642.82	3597.43	3552.04	3502.22	3435.24	3378.23	3309.04
90.0	3656.66	3607.39	3565.88	3514.40	3455.73	3379.34	3322.32	3270.29	3213.83
135.0	3687.10	3658.87	3614.59	3578.06	3502.22	3444.65	3385.43	3327.30	3259.77
180.0	3666.07	3684.34	3678.25	3642.27	3603.52	3562.00	3507.20	3452.96	3373.80
225.0	3683.78	3682.68	3657.21	3632.86	3596.88	3539.86	3495.03	3415.87	3362.18
270.0	3656.66	3681.01	3679.91	3666.62	3662.19	3610.16	3571.97	3521.04	3441.33
315.0	3687.10	3666.07	3672.71	3654.44	3605.73	3569.20	3498.35	3438.57	3381.55
360.0	3666.07	3657.77	3631.75	3580.27	3534.88	3458.49	3401.48	3347.23	3292.43

C/γ(°)	9.0	10.0	11.0	12.0	13.0	14.0	15.0	16.0	17.0
0.0	3214.38	3148.51	3079.87	3011.24	2909.39	2830.23	2745.54	2622.65	2514.71
45.0	3259.77	3183.94	3121.94	3056.63	2976.36	2906.62	2831.34	2732.25	2655.87
90.0	3133.01	3072.68	3012.34	2929.87	2858.46	2757.72	2667.49	2574.50	2475.97
135.0	3212.17	3141.87	3083.20	3001.83	2935.95	2862.33	2772.66	2685.76	2563.43
180.0	3316.79	3260.88	3195.01	3115.85	3055.52	2991.31	2898.87	2819.71	2728.93
225.0	3305.72	3224.90	3160.14	3099.80	3032.27	2940.38	2859.57	2774.88	2684.10
270.0	3385.43	3327.86	3266.42	3180.06	3110.32	3049.98	2970.27	2862.89	2785.39
315.0	3331.18	3245.94	3184.49	3121.94	3052.75	2958.65	2871.74	2783.73	2653.10
360.0	3214.38	3148.51	3079.87	3011.24	2909.39	2830.23	2745.54	2622.65	2514.71

C/γ(°)	18.0	19.0	20.0	21.0	22.0	23.0	24.0	25.0	26.0
0.0	2403.45	2254.00	2127.24	1958.41	1819.47	1675.55	1532.19	1279.78	1097.83
45.0	2555.12	2444.97	2302.71	2184.81	2059.15	1932.95	1759.14	1617.43	1472.96
90.0	2343.67	2232.41	2115.61	1991.62	1823.35	1686.07	1544.37	1405.98	1069.87
135.0	2453.83	2342.56	2205.84	2090.15	1975.02	1857.11	1696.03	1560.42	1419.27
180.0	2624.87	2525.23	2428.36	2298.28	2188.13	2067.46	1957.30	1791.80	1650.09
225.0	2575.05	2469.88	2363.60	2219.13	2097.35	1967.82	1792.90	1651.75	1510.60
270.0	2693.51	2572.84	2469.88	2357.51	2200.31	2073.55	1946.79	1774.08	1631.82
315.0	2547.93	2402.35	2279.46	2152.70	1986.64	1859.88	1723.16	1584.22	1440.30
360.0	2403.45	2254.00	2127.24	1958.41	1819.47	1675.55	1532.19	1279.78	1097.83

C/γ(°)	27.0	28.0	29.0	30.0	31.0	32.0	33.0	34.0	35.0
0.0	1061.13	914.22	777.33	626.88	520.27	428.10	331.79	267.97	214.11
45.0	1284.76	1131.98	942.67	799.86	670.89	557.41	436.74	355.92	286.73
90.0	1069.87	925.40	754.64	632.30	523.53	406.90	329.52	265.92	201.43
135.0	1274.79	1095.45	958.72	826.98	674.76	564.05	445.04	365.33	295.03
180.0	1516.69	1377.75	1191.21	1047.29	866.28	731.22	610.00	479.92	390.24
225.0	1101.26	1101.26	1028.58	877.63	702.94	580.55	475.82	386.76	296.97
270.0	1486.80	1341.22	1158.00	1012.97	869.61	736.20	587.86	488.22	401.87
315.0	1074.69	1074.69	969.30	833.40	679.19	568.87	471.78	366.83	296.86
360.0	1061.13	914.22	777.33	626.88	520.27	428.10	331.79	267.97	214.11

C/γ(°)	36.0	37.0	38.0	39.0	40.0	41.0	42.0	43.0	44.0
0.0	161.96	128.97	103.07	79.32	65.54	55.63	47.05	41.90	37.97
45.0	286.73	168.83	134.56	108.27	88.29	70.08	59.84	51.04	45.72
90.0	161.52	129.58	103.79	80.37	67.09	57.40	50.43	43.73	39.69
135.0	295.03	170.43	133.62	105.89	85.02	66.81	56.79	49.60	44.34
180.0	316.07	284.52	284.52	150.84	120.06	96.20	74.73	62.83	54.30
225.0	238.24	190.86	145.52	117.96	96.59	77.22	65.82	57.29	49.21
270.0	312.75	281.20	281.20	148.96	118.35	94.99	73.95	62.05	53.53
315.0	223.74	177.02	139.82	104.62	83.92	68.92	58.23	49.10	43.78
360.0	161.96	128.97	103.07	79.32	65.54	55.63	47.05	41.90	37.97

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	34.76	31.55	29.45	27.68	26.13	24.47	23.36	22.14	21.26
45.0	41.52	37.31	34.49	32.05	29.50	27.73	26.29	25.02	23.58
90.0	35.54	32.77	30.50	28.17	26.63	25.24	23.80	22.81	21.92
135.0	39.25	35.98	32.60	30.28	28.34	26.24	24.91	23.75	22.75
180.0	46.39	41.68	37.97	34.15	31.55	28.95	27.23	25.74	24.47
225.0	44.23	40.13	36.87	33.49	31.22	29.34	27.62	25.74	24.47
270.0	47.27	41.46	37.75	34.71	32.16	29.45	27.68	26.13	24.47
315.0	39.69	36.31	33.38	30.39	28.40	26.35	24.91	23.69	22.36
360.0	34.76	31.55	29.45	27.68	26.13	24.47	23.36	22.14	21.26

C/γ(°)	54.0	55.0	56.0	57.0	58.0	59.0	60.0	61.0	62.0
0.0	20.48	19.60	19.04	18.49	17.99	17.38	16.99	16.61	16.27
45.0	22.64	21.75	20.92	20.04	19.43	18.88	18.16	17.66	17.21
90.0	21.09	20.20	19.60	18.99	18.49	17.88	17.44	16.99	16.55
135.0	21.59	20.76	20.09	19.48	18.76	18.32	17.82	17.44	16.94
180.0	23.08	22.09	21.26	20.48	19.82	19.10	18.54	18.05	17.49
225.0	23.14	22.20	21.37	20.43	19.76	19.15	18.43	17.93	17.49
270.0	23.41	22.20	21.37	20.54	19.71	19.15	18.60	18.10	17.49
315.0	21.48	20.65	19.82	19.21	18.65	18.10	17.60	17.16	16.77
360.0	20.48	19.60	19.04	18.49	17.99	17.38	16.99	16.61	16.27

C/γ(°)	63.0	64.0	65.0	66.0	67.0	68.0	69.0	70.0	71.0
0.0	15.83	15.50	15.17	14.78	14.50	14.12	13.78	13.56	13.28
45.0	16.72	16.38	16.05	15.61	15.22	14.95	14.61	14.23	13.89
90.0	16.22	15.78	15.44	15.17	14.83	14.50	14.17	13.84	13.56
135.0	16.61	16.16	15.83	15.50	15.11	14.78	14.50	14.23	13.78
180.0	17.05	16.61	16.22	15.89	15.44	15.17	14.83	14.50	14.17
225.0	17.05	16.55	16.22	15.83	15.44	15.06	14.72	14.39	13.95
270.0	17.10	16.72	16.33	15.89	15.55	15.17	14.78	14.50	14.12
315.0	16.38	15.94	15.61	15.17	14.89	14.61	14.23	13.89	13.62
360.0	15.83	15.50	15.17	14.78	14.50	14.12	13.78	13.56	13.28

C/γ(°)	72.0	73.0	74.0	75.0	76.0	77.0	78.0	79.0	80.0
0.0	12.90	12.68	12.34	12.12	11.79	11.51	11.24	10.96	10.63
45.0	13.56	13.28	12.95	12.57	12.23	11.96	11.68	11.29	11.07
90.0	13.17	12.90	12.62	12.29	12.01	11.68	11.35	11.07	10.79
135.0	13.51	13.23	12.95	12.62	12.34	12.07	11.68	11.40	11.13
180.0	13.84	13.56	13.28	12.95	12.62	12.34	11.96	11.68	11.40
225.0	13.67	13.28	12.95	12.68	12.29	11.96	11.68	11.40	11.13
270.0	13.78	13.51	13.23	12.90	12.62	12.23	11.96	11.62	11.29
315.0	13.23	13.01	12.68	12.40	12.07	11.79	11.46	11.24	10.90
360.0	12.90	12.68	12.34	12.12	11.79	11.51	11.24	10.96	10.63

C/γ(°)	81.0	82.0	83.0	84.0	85.0	86.0	87.0	88.0	89.0
0.0	10.41	10.19	9.91	9.74	9.52	9.30	9.13	8.97	8.91
45.0	10.79	10.46	10.19	9.96	9.74	9.47	9.24	9.08	8.86
90.0	10.52	10.24	10.02	9.80	9.52	9.30	9.13	8.91	8.86
135.0	10.79	10.57	10.24	10.02	9.74	9.52	9.35	9.13	8.91
180.0	11.07	10.79	10.46	10.19	9.96	9.74	9.52	9.35	9.19
225.0	10.79	10.52	10.24	9.96	9.74	9.52	9.35	9.19	8.97
270.0	11.02	10.74	10.41	10.13	9.85	9.69	9.47	9.30	9.08
315.0	10.68	10.35	10.13	9.91	9.69	9.52	9.30	9.13	8.86
360.0	10.41	10.19	9.91	9.74	9.52	9.30	9.13	8.97	8.91

Intensity data(cd)

C/γ(°)	90.0
0.0	8.91
45.0	8.86
90.0	8.86
135.0	8.91
180.0	8.97
225.0	8.91
270.0	8.86
315.0	8.86
360.0	8.91