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NATA

Client:
LumCAT: 1-1340-M
Luminaire: 92.70.131.00
Report No: 20230302-B007
Ballast type: AC

Test No: 20230302-C007	Voltage(V): 35.320
LampCAT: CITIZEN CLU038	Current(A): 0.480
Lamp flux(lm): 2159.6	Power (W): 16.953
Number of Lamps: 1	PF: 0.000
Length(mm): 0	Width(mm): 0
Phm Type: C	Height(mm): 0

Photometric Results

Lumens(lm): 2000.53, Efficiency(%): 92.63% , Luminous Efficacy(lm/W): 118.00
Central intensity(cd): 2984.359, Maximum intensity(cd): 2984.359
Angle of maximum intensity: C=0.0 γ=0.0
Beam Angle(50%Imax): [C0/180]Total=39.4
[C90/270]Total=39.4
Field angle(10%Imax): [C0/180]Total=90.8
[C90/270]Total=90.8
Beam angle of C0 plane : 39.44
Aveage BeamAngle(IEC 61341):39.44
Maximum s/h(1/2): C0_180=0.65 C90_270=0.65
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(%): 92.63%
Up flux rate of LUM(%): - -
Down flux rate of LUM(%): 100.00%
CIE Type : Direct lighting
Output flux ratio in π solid angle : 98.749%

Zonal flux distribution table

γ(°)	Average I(cd)	Zonal F(lm)	Sum F(lm)	Eff Flux(%)	Eff Sum(%)
0.0	2984.359	0.000	0	0.00%	0.00%
1.0	2983.462	2.855	2.855	0.13%	0.14%
2.0	2980.325	8.560	11.415	0.40%	0.57%
3.0	2978.234	14.251	25.666	0.66%	1.28%
4.0	2976.964	19.934	45.6	0.92%	2.28%
5.0	2973.155	25.597	71.197	1.19%	3.56%
6.0	2957.619	31.168	102.365	1.44%	5.12%
7.0	2930.805	36.549	138.914	1.69%	6.94%
8.0	2892.414	41.676	180.59	1.93%	9.03%
9.0	2835.947	46.425	227.015	2.15%	11.35%
10.0	2758.941	50.632	277.647	2.34%	13.88%
11.0	2669.610	54.242	331.889	2.51%	16.59%
12.0	2565.267	57.225	389.114	2.65%	19.45%
13.0	2434.258	59.332	448.446	2.75%	22.42%
14.0	2307.134	60.689	509.135	2.81%	25.45%
15.0	2170.001	61.464	570.599	2.85%	28.52%
16.0	2031.972	61.571	632.17	2.85%	31.60%
17.0	1878.930	60.903	693.073	2.82%	34.64%
18.0	1732.012	59.537	752.61	2.76%	37.62%
19.0	1592.191	57.834	810.444	2.68%	40.51%
20.0	1453.415	55.743	866.187	2.58%	43.30%
21.0	1304.899	52.965	919.152	2.45%	45.95%
22.0	1173.375	49.802	968.954	2.31%	48.43%
23.0	1071.407	47.102	1016.056	2.18%	50.79%
24.0	967.399	44.576	1060.632	2.06%	53.02%
25.0	898.422	42.425	1103.056	1.96%	55.14%
26.0	841.560	41.072	1144.129	1.90%	57.19%
27.0	800.405	40.171	1184.3	1.86%	59.20%
28.0	770.245	39.766	1224.065	1.84%	61.19%
29.0	749.473	39.760	1263.825	1.84%	63.17%
30.0	729.650	39.936	1303.761	1.85%	65.17%
31.0	710.208	40.069	1343.831	1.86%	67.17%
32.0	691.341	40.153	1383.983	1.86%	69.18%
33.0	672.698	40.185	1424.168	1.86%	71.19%
34.0	655.855	40.206	1464.374	1.86%	73.20%
35.0	636.839	40.146	1504.521	1.86%	75.21%
36.0	620.280	40.027	1544.548	1.85%	77.21%
37.0	601.943	39.862	1584.41	1.85%	79.20%

Zonal flux distribution table

γ(°)	Average I(cd)	Zonal F(lm)	Sum F(lm)	Eff Flux(%)	Eff Sum(%)
38.0	577.116	39.355	1623.765	1.82%	81.17%
39.0	542.840	38.227	1661.992	1.77%	83.08%
40.0	510.208	36.727	1698.719	1.70%	84.91%
41.0	473.684	35.036	1733.755	1.62%	86.66%
42.0	430.415	32.847	1766.602	1.52%	88.31%
43.0	393.256	30.511	1797.113	1.41%	89.83%
44.0	354.103	28.207	1825.321	1.31%	91.24%
45.0	316.399	25.768	1851.089	1.19%	92.53%
46.0	270.957	22.970	1874.059	1.06%	93.68%
47.0	239.027	20.283	1894.343	0.94%	94.69%
48.0	192.658	17.451	1911.794	0.81%	95.56%
49.0	157.539	14.381	1926.175	0.67%	96.28%
50.0	118.722	11.518	1937.693	0.53%	96.86%
51.0	87.702	8.733	1946.426	0.40%	97.30%
52.0	62.165	6.431	1952.857	0.30%	97.62%
53.0	43.059	4.577	1957.434	0.21%	97.85%
54.0	33.163	3.360	1960.794	0.16%	98.01%
55.0	29.563	2.800	1963.594	0.13%	98.15%
56.0	28.315	2.615	1966.209	0.12%	98.28%
57.0	27.008	2.530	1968.739	0.12%	98.41%
58.0	25.641	2.435	1971.174	0.11%	98.53%
59.0	23.573	2.301	1973.474	0.11%	98.65%
60.0	19.263	2.024	1975.498	0.09%	98.75%
61.0	13.034	1.541	1977.039	0.07%	98.83%
62.0	8.799	1.052	1978.091	0.05%	98.88%
63.0	8.059	0.820	1978.911	0.04%	98.92%
64.0	7.962	0.786	1979.697	0.04%	98.96%
65.0	7.895	0.785	1980.482	0.04%	99.00%
66.0	7.850	0.786	1981.268	0.04%	99.04%
67.0	7.805	0.787	1982.055	0.04%	99.08%
68.0	7.753	0.788	1982.843	0.04%	99.12%
69.0	7.708	0.789	1983.632	0.04%	99.16%
70.0	7.671	0.790	1984.422	0.04%	99.19%
71.0	7.633	0.791	1985.213	0.04%	99.23%
72.0	7.611	0.793	1986.005	0.04%	99.27%
73.0	7.596	0.795	1986.8	0.04%	99.31%
74.0	7.574	0.798	1987.598	0.04%	99.35%
75.0	7.566	0.800	1988.398	0.04%	99.39%

Zonal flux distribution table

γ(°)	Average I(cd)	Zonal F(lm)	Sum F(lm)	Eff Flux(%)	Eff Sum(%)
76.0	7.551	0.802	1989.2	0.04%	99.43%
77.0	7.536	0.804	1990.005	0.04%	99.47%
78.0	7.536	0.807	1990.812	0.04%	99.51%
79.0	7.514	0.809	1991.62	0.04%	99.55%
80.0	7.484	0.809	1992.429	0.04%	99.60%
81.0	7.484	0.809	1993.238	0.04%	99.64%
82.0	7.469	0.811	1994.049	0.04%	99.68%
83.0	7.454	0.811	1994.86	0.04%	99.72%
84.0	7.462	0.813	1995.673	0.04%	99.76%
85.0	7.417	0.812	1996.485	0.04%	99.80%
86.0	7.402	0.810	1997.295	0.04%	99.84%
87.0	7.394	0.810	1998.105	0.04%	99.88%
88.0	7.372	0.809	1998.914	0.04%	99.92%
89.0	7.372	0.808	1999.722	0.04%	99.96%
90.0	7.357	0.808	2000.529	0.04%	100.00%

Zonal flux distribution table

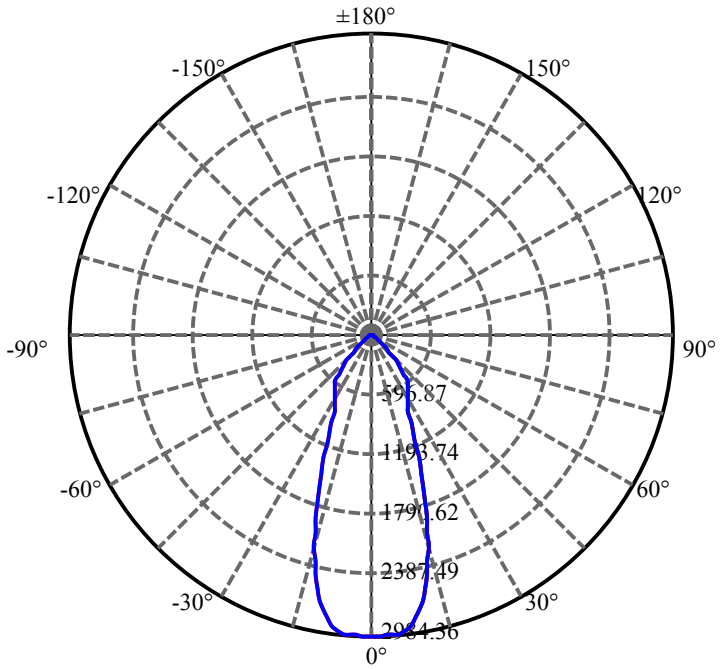
ZONAL LUMEN SUMMARY

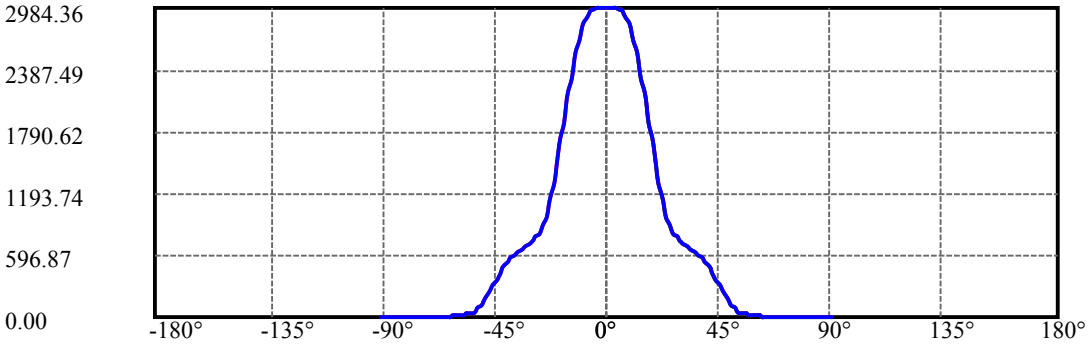
Zone	Lumens	%Lamp	%Fixt
0-30	1303.76	60.37%	65.17%
0-40	1698.72	78.66%	84.91%
0-60	1975.50	91.48%	98.75%
0-90	1999.72	92.60%	99.96%
0-120	1999.72	92.60%	99.96%
0-180	2000.53	92.63%	100.00%
60-90	24.22	1.12%	1.21%
90-120	0.00	0.00%	0.00%
90-130	0.00	0.00%	0.00%
90-150	0.00	0.00%	0.00%
90-180	0.00	0.00%	0.00%
0-37.41	1600.42	74.11%	80.00%

ZONAL LUMEN SUMMARY

0-10	277.65
10-20	588.54
20-30	437.57
30-40	394.96
40-50	238.97
50-60	37.81
60-70	8.92
70-80	8.01
80-90	7.29
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):

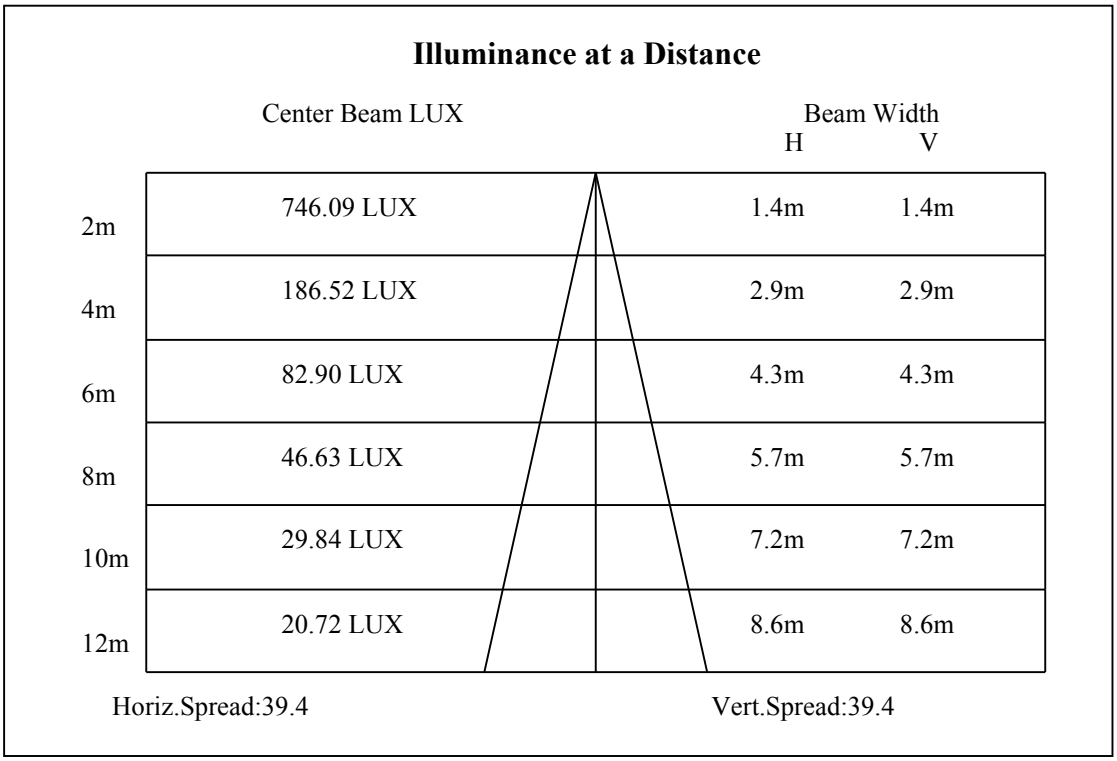
C0/C180:

C90/C270:

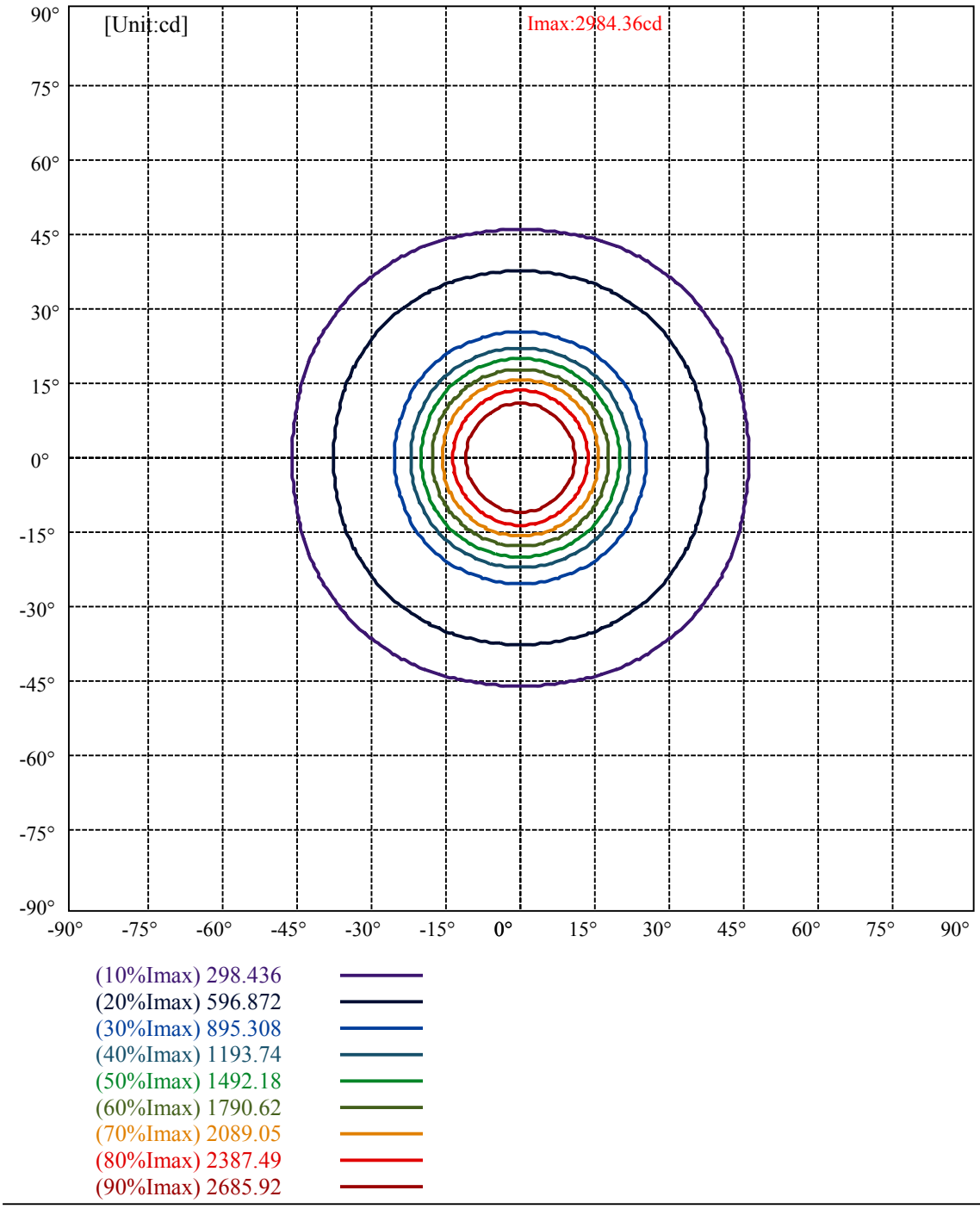
Field angle(10%Imax):C0/180Left:45.4 Right:45.4
:C90/270Left:45.4 Right:45.4

Beam Angle(50%Imax):C0/180Left:19.7 Right:19.7
:C90/270Left:19.7 Right:19.7

Lux distance Curve



ISO-Intensity(V-H)

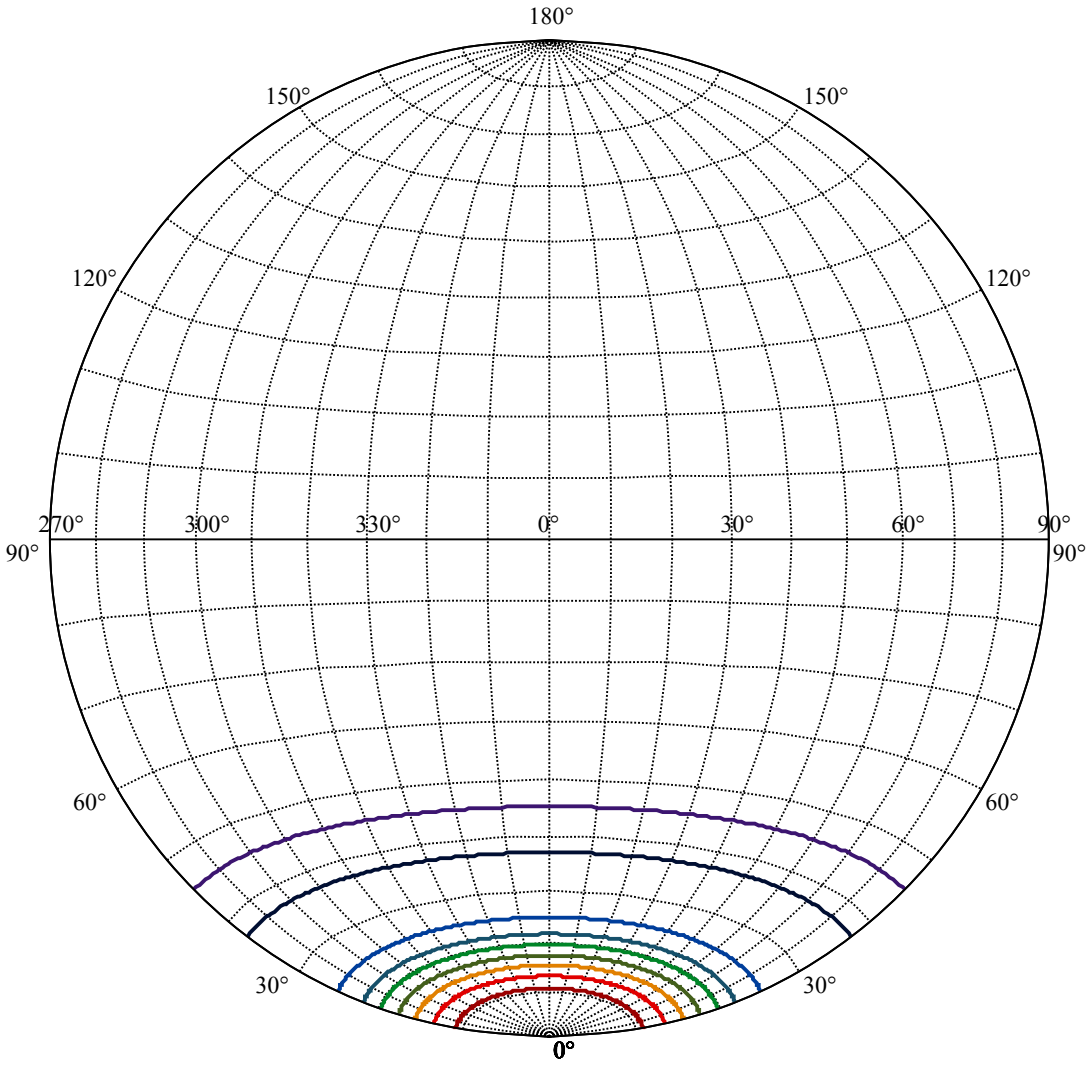


Equipment: GMS1980
Temperature(°C): 25.0

Date: 2023/3/02
Humidity(%): 60.0%

Operator: NT07
Distance(m): 7.73

ISO candela diagram on circular web



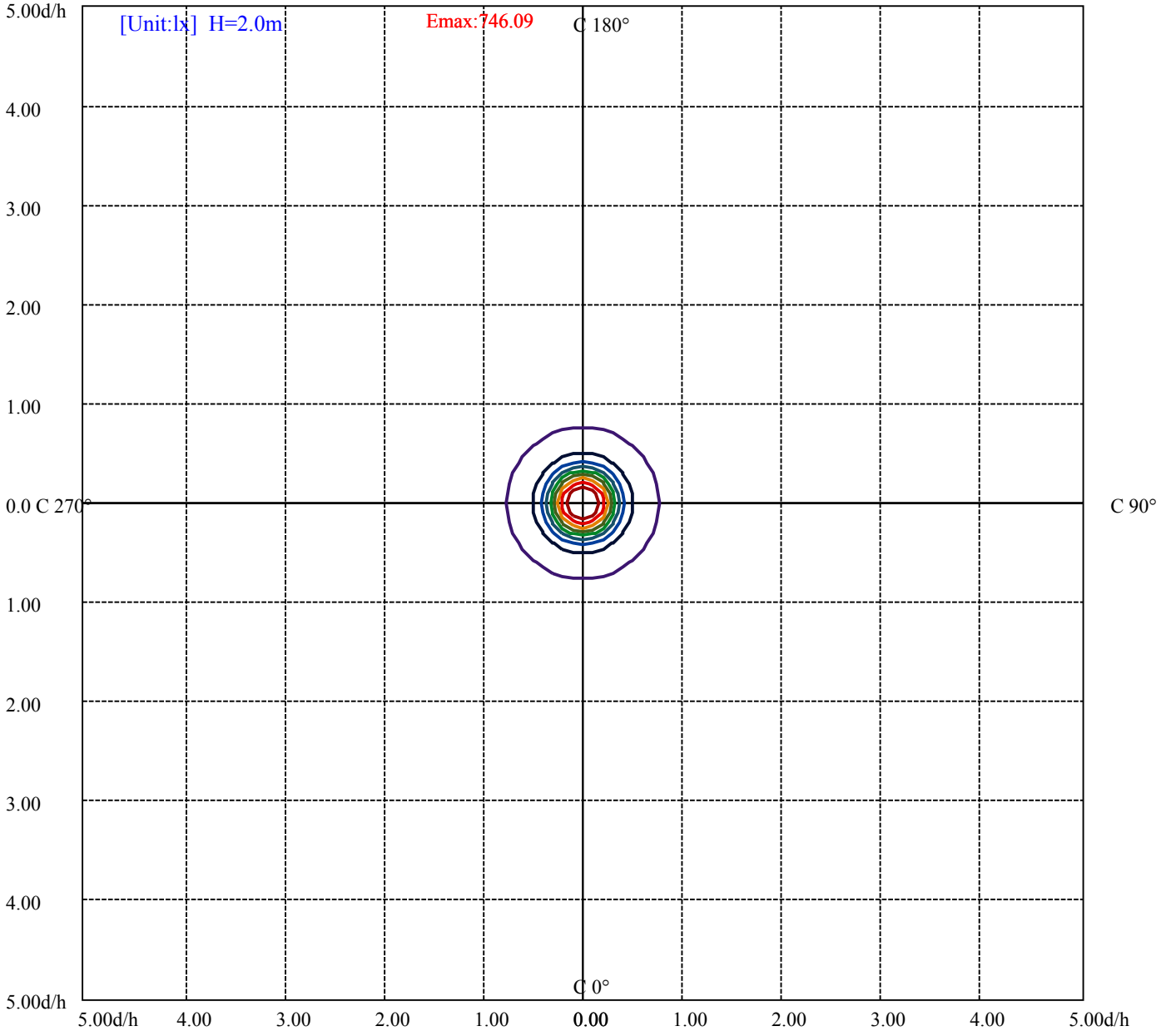
House [Unit:cd] Road

Imax:2984.36

(10%Imax) 298.436
(20%Imax) 596.872
(30%Imax) 895.308
(40%Imax) 1193.74
(50%Imax) 1492.18
(60%Imax) 1790.62
(70%Imax) 2089.05
(80%Imax) 2387.49
(90%Imax) 2685.92

Equipment: GMS1980 Date: 2023/3/02 Operator: NT07
Temperature(°C): 25.0 Humidity(%): 60.0% Distance(m): 7.73

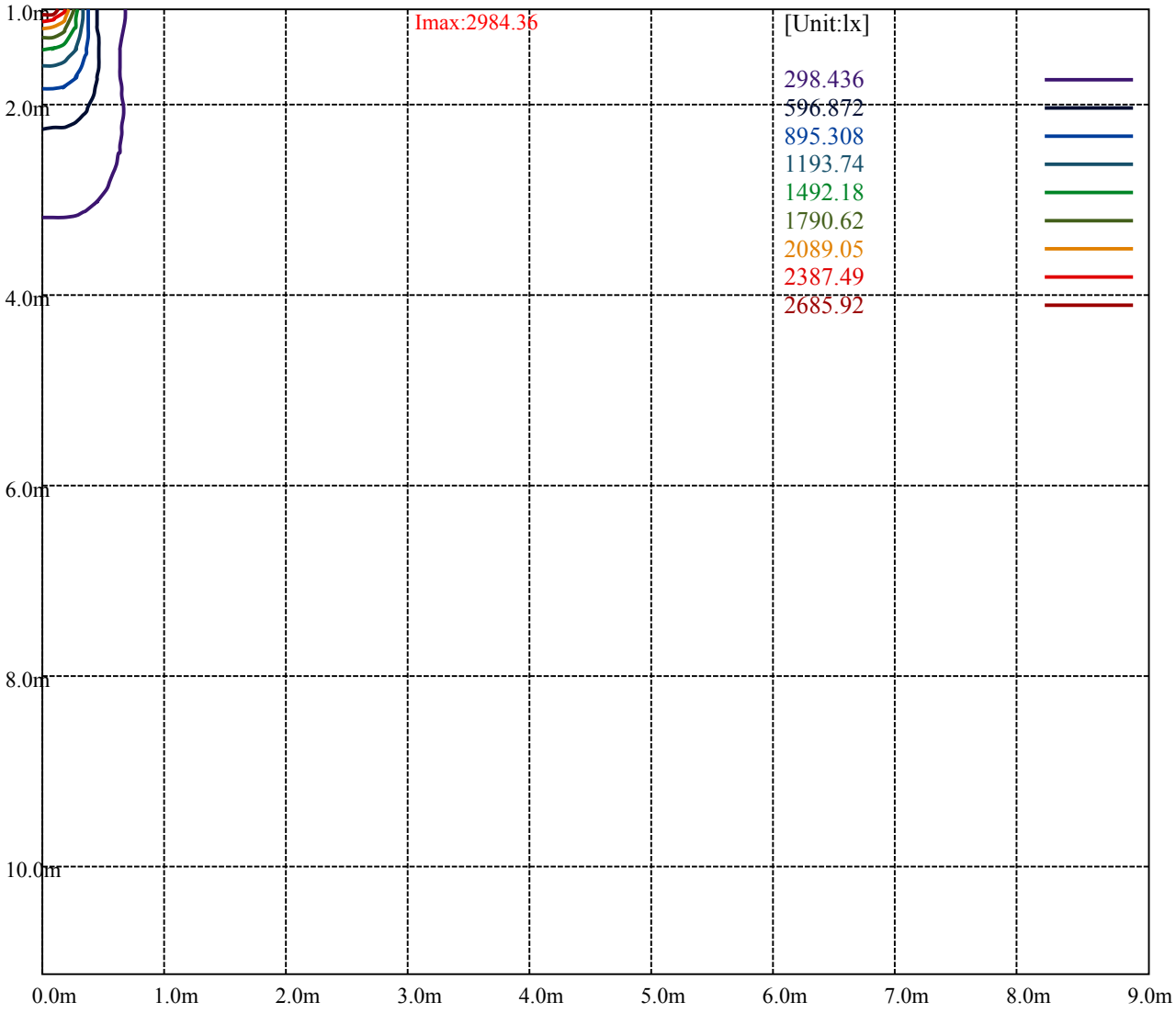
ISO illuminance diagram



(10%Emax) 74.609
(20%Emax) 149.218
(30%Emax) 223.8268
(40%Emax) 298.435
(50%Emax) 373.045
(60%Emax) 447.6525
(70%Emax) 522.2625
(80%Emax) 596.8725
(90%Emax) 671.48

Equipment: GMS1980
Temperature(°C): 25.0
Date: 2023/3/02
Humidity(%): 60.0%
Operator: NT07
Distance(m): 7.73

Space ISO Lux diagram



Equipment: GMS1980
Temperature(°C): 25.0

Date: 2023/3/02
Humidity(%): 60.0%

Operator: NT07
Distance(m): 7.73

Luminance Limitting Curve(no luminous side)

Luminance Table

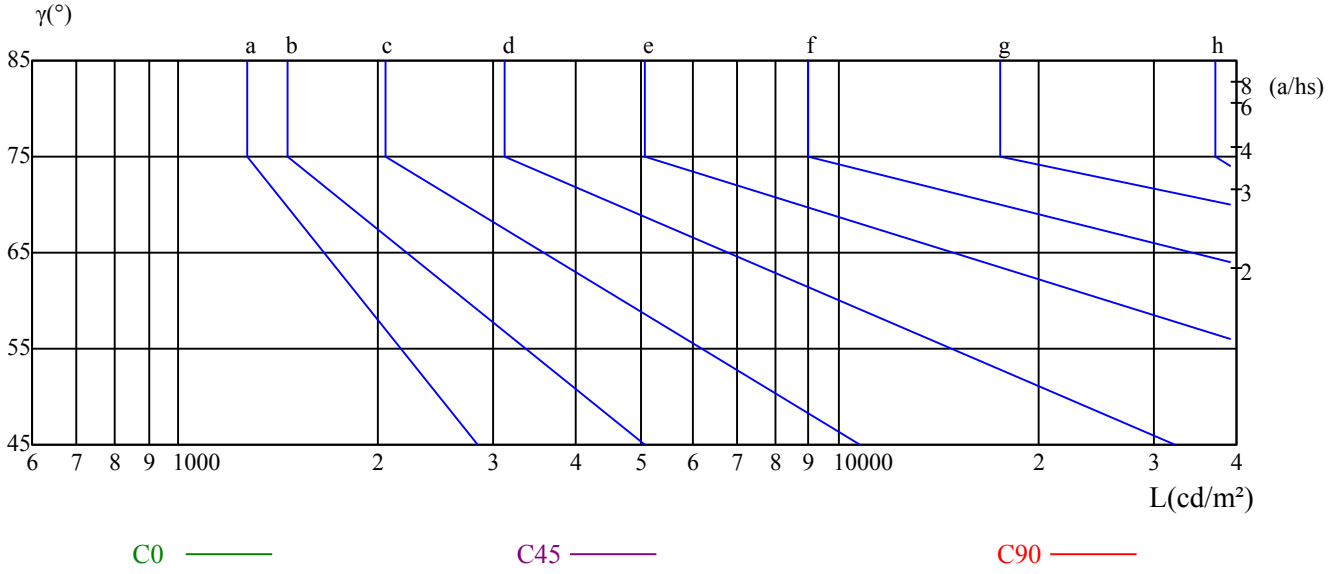
γ	45	50	55	60	65	70	75	80	85
C0	0	0	0	0	0	0	0	0	0
C45	0	0	0	0	0	0	0	0	0
C90	0	0	0	0	0	0	0	0	0

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



Equipment: GMS1980
Temperature(°C): 25.0

Date: 2023/3/02
Humidity(%): 60.0%

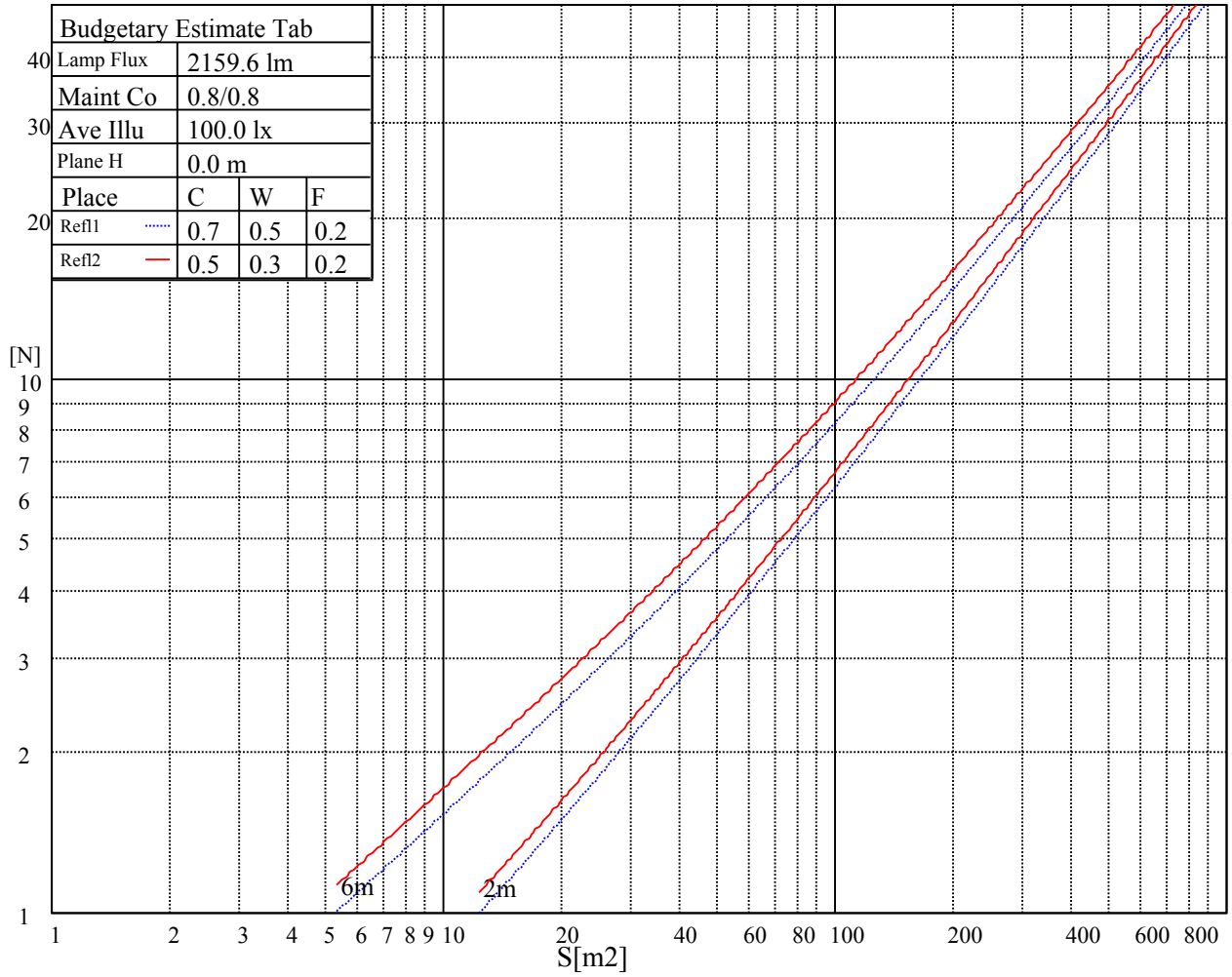
Operator: NT07
Distance(m): 7.73

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

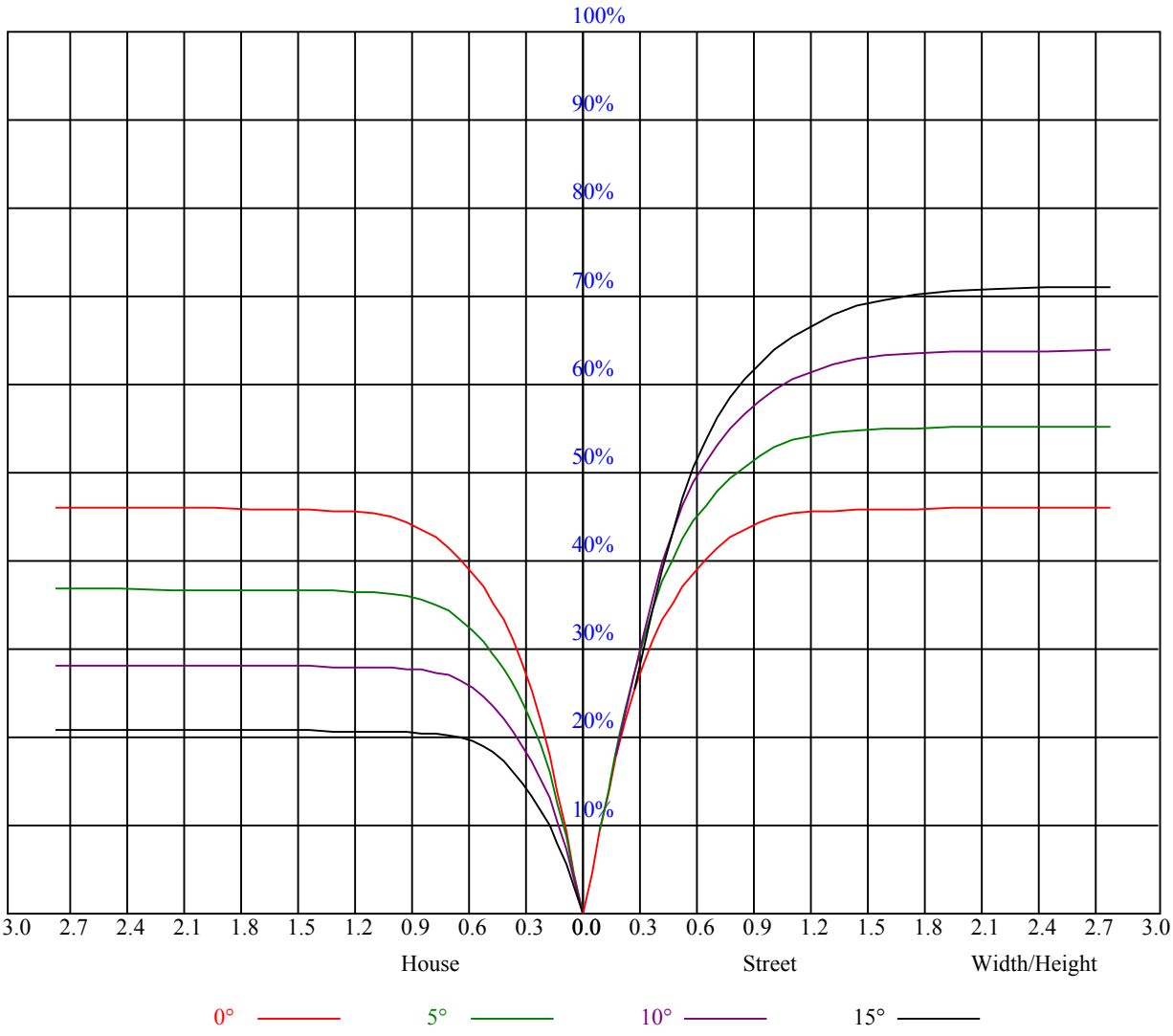


Equipment: GMS1980 Date: 2023/3/02 Operator: NT07
Temperature(°C): 25.0 Humidity(%): 60.0% Distance(m): 7.73

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	1.10	1.10	1.10	1.08	1.08	1.08	1.03	1.03	1.03	0.99	0.99	0.99	0.95	0.95	0.95	0.93
1	1.02	1.00	0.98	1.00	0.98	0.96	0.96	0.95	0.93	0.93	0.92	0.90	0.90	0.89	0.88	0.86
2	0.95	0.91	0.88	0.93	0.90	0.87	0.90	0.87	0.85	0.88	0.85	0.83	0.85	0.83	0.81	0.80
3	0.88	0.84	0.80	0.87	0.83	0.79	0.85	0.81	0.78	0.82	0.79	0.77	0.80	0.78	0.75	0.74
4	0.82	0.77	0.73	0.81	0.77	0.73	0.79	0.75	0.72	0.77	0.74	0.71	0.76	0.73	0.70	0.69
5	0.77	0.72	0.68	0.76	0.71	0.67	0.75	0.70	0.67	0.73	0.69	0.66	0.72	0.68	0.65	0.64
6	0.72	0.67	0.63	0.72	0.66	0.63	0.70	0.66	0.62	0.69	0.65	0.62	0.68	0.64	0.61	0.60
7	0.68	0.62	0.59	0.67	0.62	0.58	0.66	0.62	0.58	0.65	0.61	0.58	0.64	0.60	0.57	0.56
8	0.64	0.59	0.55	0.64	0.58	0.55	0.63	0.58	0.54	0.62	0.57	0.54	0.61	0.57	0.54	0.53
9	0.61	0.55	0.52	0.60	0.55	0.52	0.59	0.55	0.51	0.59	0.54	0.51	0.58	0.54	0.51	0.50
10	0.58	0.52	0.49	0.57	0.52	0.49	0.56	0.52	0.48	0.56	0.51	0.48	0.55	0.51	0.48	0.47

Coefficient Utilization Curve



Equipment: GMS1980	Date: 2023/3/02	Operator: NT07
Temperature(°C): 25.0	Humidity(%): 60.0%	Distance(m): 7.73

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	2990.63	2989.44	2983.46	2979.28	2976.29	2972.71	2962.55	2941.64	2913.55
45.0	2979.28	2973.90	2968.52	2962.55	2958.37	2951.20	2926.70	2892.64	2850.21
90.0	2980.47	2978.68	2978.68	2978.68	2975.69	2967.33	2951.20	2915.94	2862.76
135.0	2987.05	2986.45	2985.25	2982.86	2979.88	2975.69	2960.16	2933.27	2886.66
180.0	2990.63	2990.04	2989.44	2988.24	2982.27	2969.72	2935.66	2896.22	2846.63
225.0	2979.28	2983.46	2983.46	2984.06	2989.44	2992.43	2989.44	2972.71	2945.22
270.0	2980.47	2982.27	2979.28	2978.08	2981.67	2985.25	2978.08	2961.95	2942.23
315.0	2987.05	2983.46	2974.50	2972.11	2972.11	2970.91	2957.17	2932.07	2892.04
360.0	2990.63	2989.44	2983.46	2979.28	2976.29	2972.71	2962.55	2941.64	2913.55

C/γ(°)	9.0	10.0	11.0	12.0	13.0	14.0	15.0	16.0	17.0
0.0	2877.70	2811.37	2743.26	2660.20	2533.52	2418.80	2293.32	2146.32	1995.15
45.0	2776.12	2697.25	2603.43	2480.34	2345.30	2216.24	2068.65	1936.59	1786.61
90.0	2800.62	2711.59	2602.24	2492.29	2354.86	2209.06	2075.22	1922.85	1783.62
135.0	2831.09	2751.02	2651.24	2549.66	2421.19	2281.96	2152.90	2020.25	1847.56
180.0	2768.95	2672.15	2572.36	2446.28	2311.84	2186.36	2037.57	1902.53	1747.77
225.0	2904.59	2830.49	2753.41	2661.39	2525.76	2403.86	2277.78	2131.98	1977.22
270.0	2895.03	2832.29	2770.14	2659.60	2538.90	2435.53	2277.18	2147.52	2013.67
315.0	2833.48	2765.36	2660.80	2572.36	2442.70	2305.27	2177.40	2047.73	1879.83
360.0	2877.70	2811.37	2743.26	2660.20	2533.52	2418.80	2293.32	2146.32	1995.15

C/γ(°)	18.0	19.0	20.0	21.0	22.0	23.0	24.0	25.0	26.0
0.0	1860.71	1712.52	1582.85	1436.46	1326.51	1177.13	1060.61	983.53	896.29
45.0	1634.24	1502.19	1358.78	1218.96	1099.45	1005.04	910.04	852.08	811.44
90.0	1628.27	1478.29	1349.82	1190.28	1091.33	982.58	899.34	843.65	796.98
135.0	1709.53	1573.89	1426.30	1281.10	1157.41	1040.90	941.11	874.78	821.00
180.0	1592.41	1458.57	1327.71	1170.92	1063.12	972.42	892.11	832.84	794.00
225.0	1839.79	1686.82	1552.98	1403.60	1179.22	1135.72	1019.50	936.87	867.73
270.0	1844.57	1711.32	1562.54	1414.35	1286.48	1167.57	1039.10	956.64	890.92
315.0	1746.58	1613.93	1466.34	1323.53	1183.47	1089.89	977.38	906.99	854.11
360.0	1860.71	1712.52	1582.85	1436.46	1326.51	1177.13	1060.61	983.53	896.29

C/γ(°)	27.0	28.0	29.0	30.0	31.0	32.0	33.0	34.0	35.0
0.0	844.91	807.86	777.98	758.26	740.34	718.83	701.50	683.57	662.06
45.0	777.39	755.87	737.35	716.44	696.72	678.20	657.28	641.15	624.42
90.0	766.99	743.39	726.42	707.41	689.91	668.58	651.84	635.89	617.84
135.0	786.95	757.07	736.16	718.83	699.11	680.59	662.66	646.53	628.00
180.0	761.79	739.56	722.17	701.74	682.32	665.71	646.94	632.01	614.56
225.0	821.90	777.15	758.56	740.58	719.78	699.71	682.98	665.89	644.20
270.0	831.16	798.30	776.19	753.48	732.57	715.24	694.93	676.40	655.49
315.0	812.16	782.76	760.95	740.46	720.92	703.89	683.45	665.41	648.14
360.0	844.91	807.86	777.98	758.26	740.34	718.83	701.50	683.57	662.06

C/γ(°)	36.0	37.0	38.0	39.0	40.0	41.0	42.0	43.0	44.0
0.0	647.12	632.19	612.47	583.19	553.31	518.06	479.82	440.38	396.16
45.0	607.09	584.98	556.30	516.27	481.61	445.16	399.15	359.71	326.25
90.0	601.89	580.02	546.44	513.16	477.43	435.66	394.73	356.49	315.67
135.0	612.47	596.33	568.85	534.79	502.52	462.49	420.66	384.21	344.77
180.0	596.04	574.17	545.13	509.87	473.06	437.27	388.93	350.57	313.58
225.0	628.48	611.93	591.61	561.86	531.32	494.10	454.96	418.81	376.02
270.0	638.16	621.43	604.10	568.25	538.37	506.70	460.69	427.83	390.78
315.0	630.99	614.50	592.03	555.34	524.03	490.03	444.38	408.05	369.57
360.0	647.12	632.19	612.47	583.19	553.31	518.06	479.82	440.38	396.16

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	358.52	316.09	305.93	233.39	195.93	151.23	120.76	89.93	61.90
45.0	305.93	237.04	201.91	164.14	130.98	97.88	68.12	48.40	38.60
90.0	276.89	237.40	194.26	163.60	126.50	89.03	62.32	39.74	27.01
135.0	305.34	261.12	219.59	183.14	148.49	111.62	76.84	51.93	31.73
180.0	269.84	229.63	190.97	152.19	118.49	82.52	55.75	36.09	26.89
225.0	338.56	292.73	249.53	211.29	175.14	131.76	99.31	70.27	43.50
270.0	349.55	308.92	303.54	227.36	194.02	152.73	119.69	87.90	62.98
315.0	326.55	284.72	246.48	206.15	170.77	133.01	98.83	73.08	51.87
360.0	358.52	316.09	305.93	233.39	195.93	151.23	120.76	89.93	61.90

C/γ(°)	54.0	55.0	56.0	57.0	58.0	59.0	60.0	61.0	62.0
0.0	45.77	37.94	34.54	32.57	30.23	27.67	24.44	20.26	10.16
45.0	34.72	33.64	32.57	30.41	28.38	25.16	16.79	8.13	8.07
90.0	21.51	20.50	19.36	18.46	17.75	16.19	12.01	8.19	7.95
135.0	24.80	23.60	23.12	22.71	22.11	20.97	18.88	8.60	8.07
180.0	24.62	24.44	23.96	23.18	22.47	21.15	13.56	8.13	8.01
225.0	28.50	22.29	21.69	21.27	20.79	20.08	19.00	14.22	8.78
270.0	46.61	39.97	38.60	37.11	35.49	33.52	30.06	24.50	11.11
315.0	38.78	34.12	32.68	30.35	27.90	23.84	19.36	12.25	8.25
360.0	45.77	37.94	34.54	32.57	30.23	27.67	24.44	20.26	10.16

C/γ(°)	63.0	64.0	65.0	66.0	67.0	68.0	69.0	70.0	71.0
0.0	8.25	8.13	8.07	8.01	7.95	7.89	7.83	7.77	7.71
45.0	8.01	7.89	7.83	7.83	7.77	7.71	7.71	7.65	7.65
90.0	7.89	7.83	7.77	7.77	7.71	7.65	7.65	7.65	7.65
135.0	7.95	7.89	7.83	7.77	7.77	7.71	7.65	7.59	7.59
180.0	7.95	7.83	7.77	7.77	7.71	7.71	7.65	7.59	7.59
225.0	8.13	8.01	7.95	7.89	7.83	7.77	7.71	7.71	7.59
270.0	8.19	8.07	8.01	7.89	7.89	7.83	7.77	7.71	7.65
315.0	8.13	8.07	7.95	7.89	7.83	7.77	7.71	7.71	7.65
360.0	8.25	8.13	8.07	8.01	7.95	7.89	7.83	7.77	7.71

C/γ(°)	72.0	73.0	74.0	75.0	76.0	77.0	78.0	79.0	80.0
0.0	7.71	7.65	7.65	7.65	7.65	7.65	7.71	7.65	7.59
45.0	7.59	7.65	7.59	7.65	7.59	7.59	7.53	7.53	7.53
90.0	7.59	7.59	7.53	7.53	7.59	7.53	7.59	7.53	7.47
135.0	7.59	7.59	7.53	7.53	7.47	7.47	7.47	7.47	7.47
180.0	7.59	7.53	7.53	7.47	7.47	7.47	7.47	7.47	7.41
225.0	7.59	7.53	7.59	7.53	7.53	7.53	7.47	7.47	7.47
270.0	7.65	7.65	7.59	7.59	7.59	7.53	7.53	7.53	7.47
315.0	7.59	7.59	7.59	7.59	7.53	7.53	7.53	7.47	7.47
360.0	7.71	7.65	7.65	7.65	7.65	7.65	7.71	7.65	7.59

C/γ(°)	81.0	82.0	83.0	84.0	85.0	86.0	87.0	88.0	89.0
0.0	7.59	7.53	7.47	7.53	7.47	7.47	7.47	7.41	7.35
45.0	7.53	7.47	7.53	7.53	7.47	7.41	7.41	7.35	7.41
90.0	7.53	7.47	7.41	7.41	7.35	7.35	7.35	7.35	7.41
135.0	7.41	7.41	7.41	7.41	7.35	7.35	7.35	7.35	7.35
180.0	7.41	7.41	7.41	7.35	7.35	7.35	7.35	7.35	7.35
225.0	7.47	7.47	7.41	7.47	7.41	7.41	7.41	7.41	7.41
270.0	7.47	7.53	7.47	7.53	7.47	7.47	7.41	7.35	7.35
315.0	7.47	7.47	7.53	7.47	7.47	7.41	7.41	7.41	7.35
360.0	7.59	7.53	7.47	7.53	7.47	7.47	7.47	7.41	7.35

Intensity data(cd)

C/γ(°)	90.0
0.0	7.35
45.0	7.35
90.0	7.35
135.0	7.35
180.0	7.35
225.0	7.41
270.0	7.35
315.0	7.35
360.0	7.35