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: 1-1375-L
Luminaire: 92.70.427.00
Report No: 2023718-B015
Ballast type: AC

Test No: 2023718-C015	Voltage(V): 35.500
LampCAT: CITIZEN CLU028	Current(A): 0.282
Lamp flux(lm): 1223.2	Power (W): 10.011
Number of Lamps: 1	PF: 0.000
Length(mm): 0	Width(mm): 0
Phm Type: C	Height(mm): 0

Photometric Results

Lumens(lm): 1118.20, Efficiency(%): 91.42% , Luminous Efficacy(lm/W): 111.70
Central intensity(cd): 2211.736, Maximum intensity(cd): 2211.736
Angle of maximum intensity: C=0.0 γ=0.0
Beam Angle(50%Imax): [C0/180]Total=41.2
[C90/270]Total=41.2
Field angle(10%Imax): [C0/180]Total=63.4
[C90/270]Total=63.4
Maximum s/h(1/2): C0_180=0.67 C90_270=0.67
Maximum s/h(1/4): C0_180=0.64 C90_270=0.64
Up flux rate of lamp(%): 0.00%
Down flux rate of lamp(%): 91.42%
Up flux rate of LUM(%): - -
Down flux rate of LUM(%): 100.00%
CIE Type : Direct lighting
Output flux ratio in π solid angle : 97.678%

Zonal flux distribution table

γ(°)	Average I(cd)	Zonal F(lm)	Sum F(lm)	Eff Flux(%)	Eff Sum(%)
0.0	2211.736	0.000	0	0.00%	0.00%
1.0	2210.629	2.116	2.116	0.17%	0.19%
2.0	2205.855	6.339	8.455	0.52%	0.76%
3.0	2198.520	10.534	18.989	0.86%	1.70%
4.0	2188.418	14.684	33.673	1.20%	3.01%
5.0	2175.549	18.774	52.447	1.53%	4.69%
6.0	2159.981	22.784	75.231	1.86%	6.73%
7.0	2141.921	26.702	101.933	2.18%	9.12%
8.0	2118.534	30.491	132.424	2.49%	11.84%
9.0	2084.769	34.065	166.49	2.78%	14.89%
10.0	2044.707	37.370	203.86	3.06%	18.23%
11.0	1998.486	40.400	244.26	3.30%	21.84%
12.0	1942.164	43.077	287.337	3.52%	25.70%
13.0	1875.947	45.311	332.648	3.70%	29.75%
14.0	1796.238	47.004	379.652	3.84%	33.95%
15.0	1710.509	48.142	427.794	3.94%	38.26%
16.0	1612.672	48.694	476.488	3.98%	42.61%
17.0	1507.085	48.583	525.071	3.97%	46.96%
18.0	1378.844	47.583	572.654	3.89%	51.21%
19.0	1236.094	45.495	618.148	3.72%	55.28%
20.0	1157.022	43.801	661.949	3.58%	59.20%
21.0	1075.486	42.869	704.817	3.50%	63.03%
22.0	966.391	41.032	745.85	3.35%	66.70%
23.0	861.025	38.344	784.194	3.13%	70.13%
24.0	757.383	35.384	819.578	2.89%	73.29%
25.0	666.360	32.373	851.951	2.65%	76.19%
26.0	578.570	29.387	881.338	2.40%	78.82%
27.0	496.349	26.298	907.636	2.15%	81.17%
28.0	424.825	23.322	930.958	1.91%	83.25%
29.0	353.841	20.372	951.33	1.67%	85.08%
30.0	293.443	17.477	968.807	1.43%	86.64%
31.0	252.004	15.179	983.986	1.24%	88.00%
32.0	209.181	13.212	997.198	1.08%	89.18%
33.0	170.544	11.187	1008.385	0.91%	90.18%
34.0	124.712	8.935	1017.32	0.73%	90.98%
35.0	101.823	7.035	1024.356	0.58%	91.61%
36.0	87.161	6.017	1030.373	0.49%	92.15%
37.0	75.350	5.300	1035.673	0.43%	92.62%

Zonal flux distribution table

γ(°)	Average I(cd)	Zonal F(lm)	Sum F(lm)	Eff Flux(%)	Eff Sum(%)
38.0	67.054	4.753	1040.426	0.39%	93.04%
39.0	59.844	4.331	1044.758	0.35%	93.43%
40.0	53.859	3.966	1048.723	0.32%	93.79%
41.0	49.016	3.663	1052.387	0.30%	94.11%
42.0	44.567	3.400	1055.787	0.28%	94.42%
43.0	40.775	3.161	1058.948	0.26%	94.70%
44.0	37.260	2.945	1061.893	0.24%	94.96%
45.0	34.174	2.745	1064.638	0.22%	95.21%
46.0	31.558	2.571	1067.209	0.21%	95.44%
47.0	29.095	2.412	1069.621	0.20%	95.66%
48.0	27.109	2.272	1071.894	0.19%	95.86%
49.0	25.269	2.151	1074.044	0.18%	96.05%
50.0	23.657	2.040	1076.084	0.17%	96.23%
51.0	22.238	1.942	1078.026	0.16%	96.41%
52.0	20.944	1.853	1079.879	0.15%	96.57%
53.0	19.734	1.769	1081.649	0.14%	96.73%
54.0	18.675	1.693	1083.341	0.14%	96.88%
55.0	17.755	1.626	1084.968	0.13%	97.03%
56.0	16.841	1.563	1086.531	0.13%	97.17%
57.0	16.039	1.503	1088.034	0.12%	97.30%
58.0	15.319	1.450	1089.484	0.12%	97.43%
59.0	14.648	1.401	1090.885	0.11%	97.56%
60.0	14.011	1.354	1092.239	0.11%	97.68%
61.0	13.444	1.310	1093.55	0.11%	97.80%
62.0	12.925	1.271	1094.82	0.10%	97.91%
63.0	12.399	1.232	1096.052	0.10%	98.02%
64.0	11.929	1.194	1097.246	0.10%	98.13%
65.0	11.514	1.160	1098.406	0.09%	98.23%
66.0	11.105	1.129	1099.534	0.09%	98.33%
67.0	10.718	1.097	1100.632	0.09%	98.43%
68.0	10.337	1.067	1101.698	0.09%	98.52%
69.0	9.977	1.036	1102.735	0.08%	98.62%
70.0	9.625	1.007	1103.741	0.08%	98.71%
71.0	9.292	0.978	1104.719	0.08%	98.79%
72.0	8.974	0.950	1105.669	0.08%	98.88%
73.0	8.656	0.922	1106.591	0.08%	98.96%
74.0	8.338	0.893	1107.484	0.07%	99.04%
75.0	8.054	0.866	1108.35	0.07%	99.12%

Zonal flux distribution table

γ(°)	Average I(cd)	Zonal F(lm)	Sum F(lm)	Eff Flux(%)	Eff Sum(%)
76.0	7.743	0.839	1109.189	0.07%	99.19%
77.0	7.452	0.810	1109.999	0.07%	99.27%
78.0	7.141	0.781	1110.78	0.06%	99.34%
79.0	6.850	0.752	1111.532	0.06%	99.40%
80.0	6.546	0.722	1112.254	0.06%	99.47%
81.0	6.269	0.693	1112.947	0.06%	99.53%
82.0	6.040	0.668	1113.614	0.05%	99.59%
83.0	5.805	0.644	1114.258	0.05%	99.65%
84.0	5.598	0.621	1114.88	0.05%	99.70%
85.0	5.397	0.600	1115.48	0.05%	99.76%
86.0	5.196	0.579	1116.059	0.05%	99.81%
87.0	5.037	0.560	1116.619	0.05%	99.86%
88.0	4.878	0.543	1117.162	0.04%	99.91%
89.0	4.740	0.527	1117.689	0.04%	99.95%
90.0	4.670	0.516	1118.205	0.04%	100.00%

Zonal flux distribution table

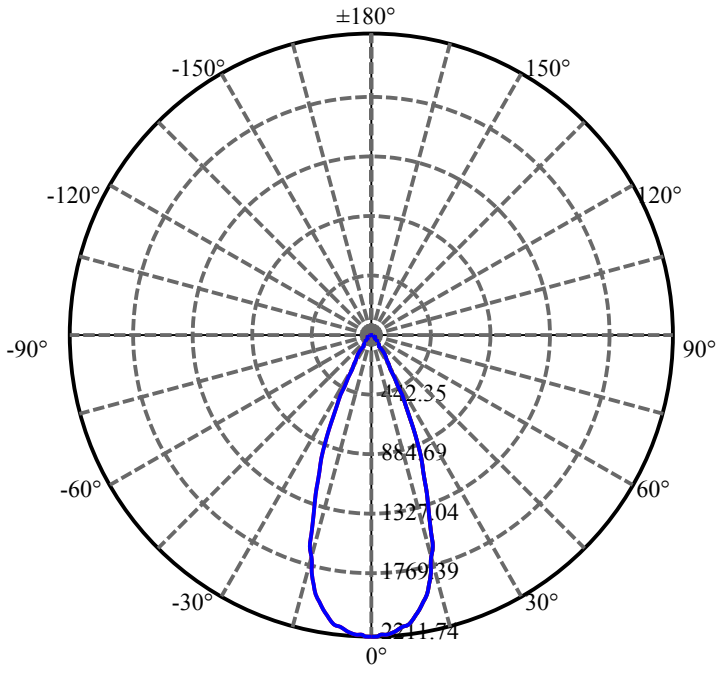
ZONAL LUMEN SUMMARY

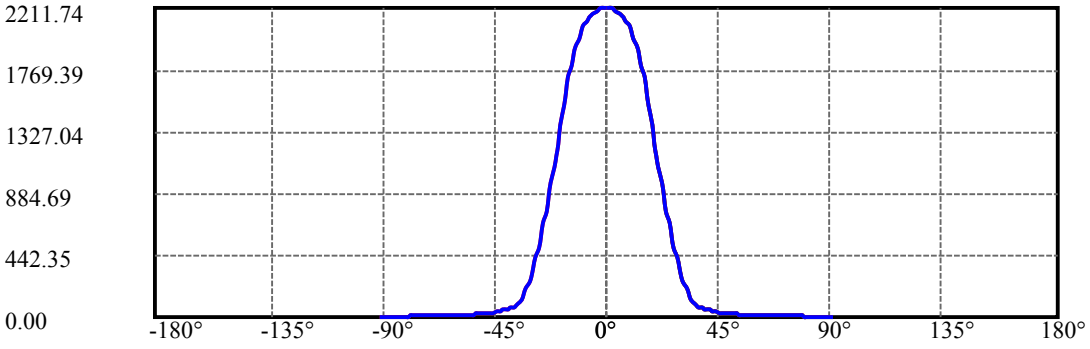
Zone	Lumens	%Lamp	%Fixt
0-30	968.81	79.20%	86.64%
0-40	1048.72	85.74%	93.79%
0-60	1092.24	89.29%	97.68%
0-90	1117.69	91.37%	99.95%
0-120	1117.69	91.37%	99.95%
0-180	1118.20	91.42%	100.00%
60-90	25.45	2.08%	2.28%
90-120	0.00	0.00%	0.00%
90-130	0.00	0.00%	0.00%
90-150	0.00	0.00%	0.00%
90-180	0.00	0.00%	0.00%
0-26.50	894.56	73.13%	80.00%

ZONAL LUMEN SUMMARY

0-10	203.86
10-20	458.09
20-30	306.86
30-40	79.92
40-50	27.36
50-60	16.15
60-70	11.50
70-80	8.51
80-90	5.44
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):

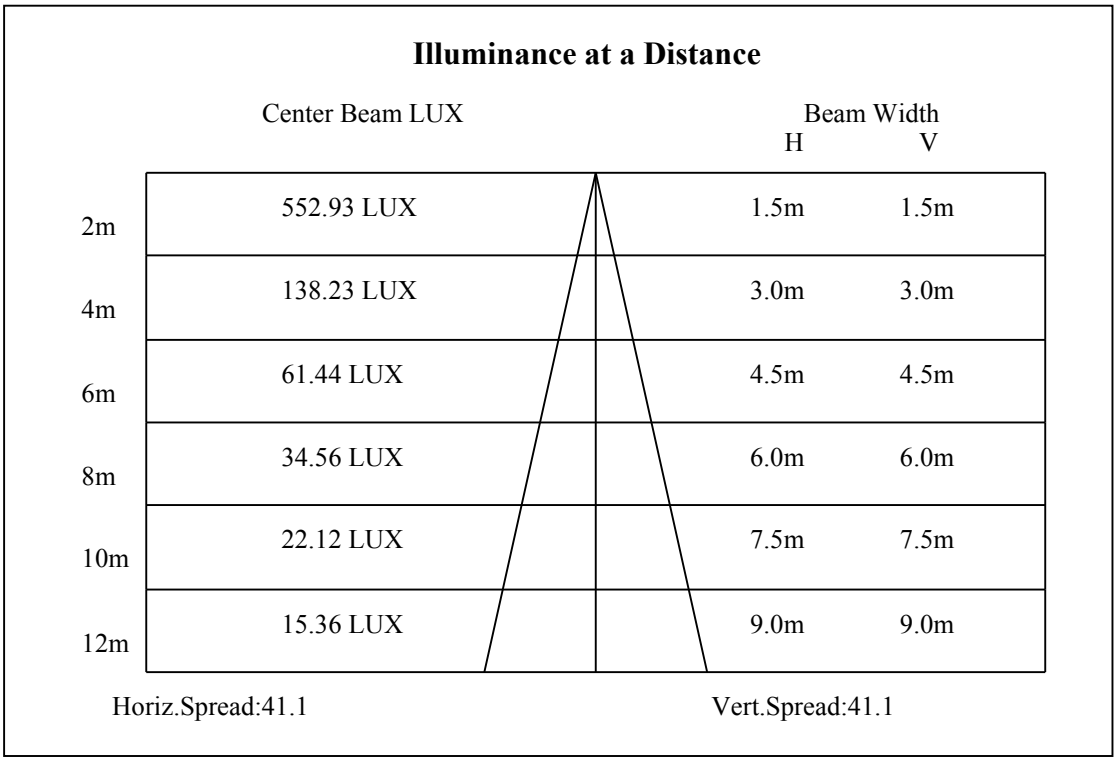
C0/C180:

C90/C270:

Field angle(10%Imax):C0/180Left:31.7 Right:31.7
:C90/270Left:31.7 Right:31.7

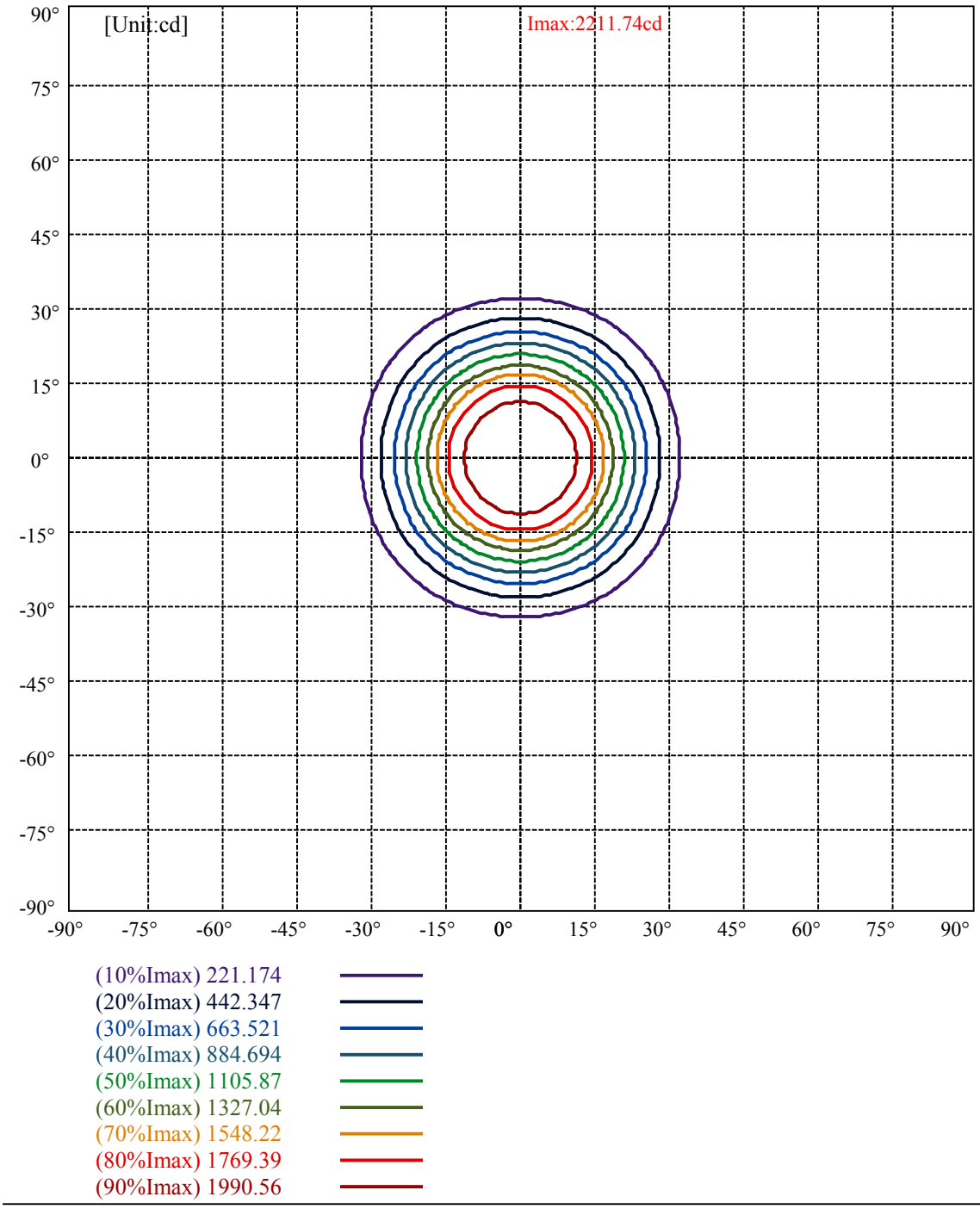
Beam Angle(50%Imax):C0/180Left:20.6 Right:20.6
:C90/270Left:20.6 Right:20.6

Lux distance Curve



Equipment: GMS1980 Date: 2023/7/18 Operator: NT07
Temperature(°C): 25.0 Humidity(%): 60.0% Distance(m): 7.44

ISO-Intensity(V-H)

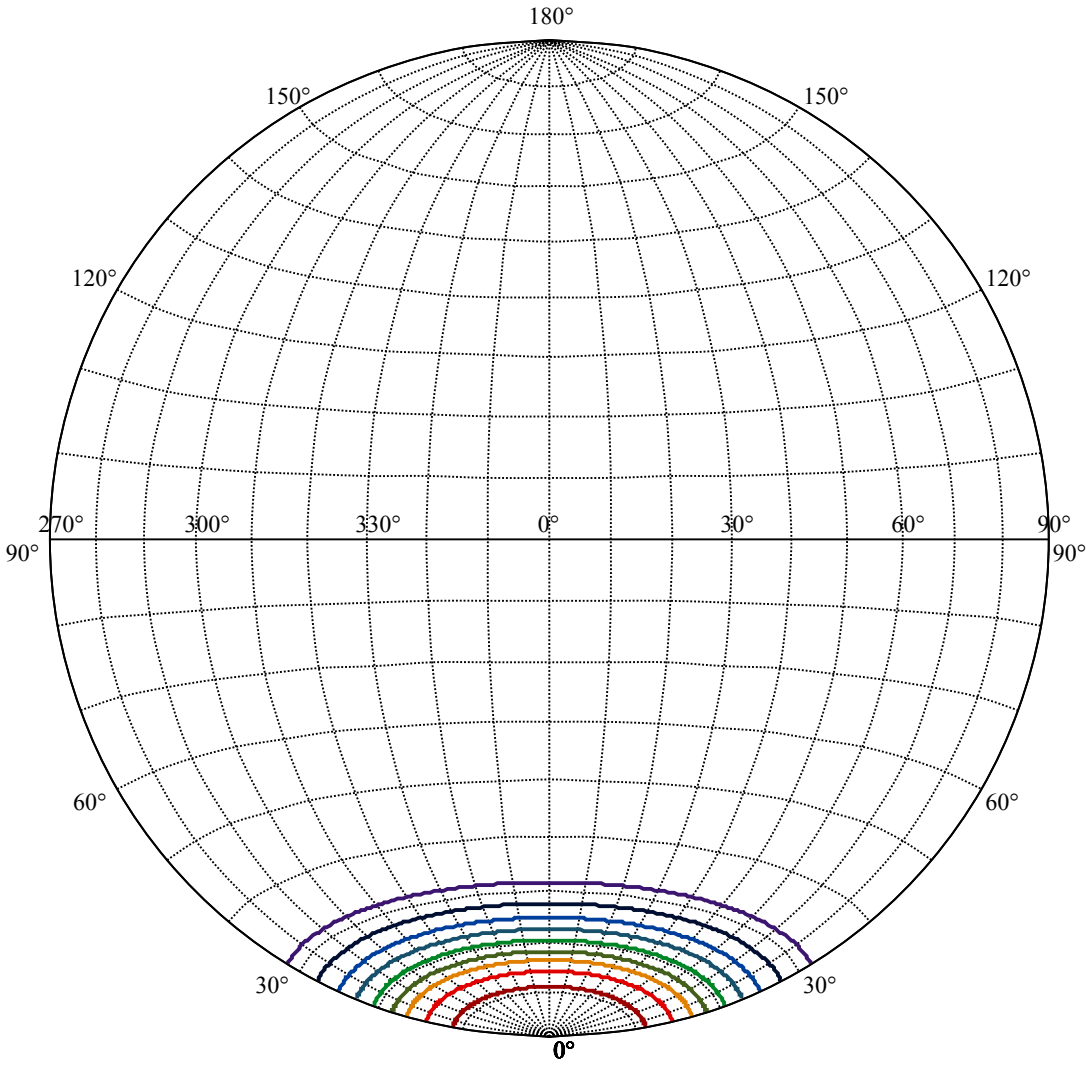


Equipment: GMS1980
Temperature(°C): 25.0

Date: 2023/7/18
Humidity(%): 60.0%

Operator: NT07
Distance(m): 7.44

ISO candela diagram on circular web



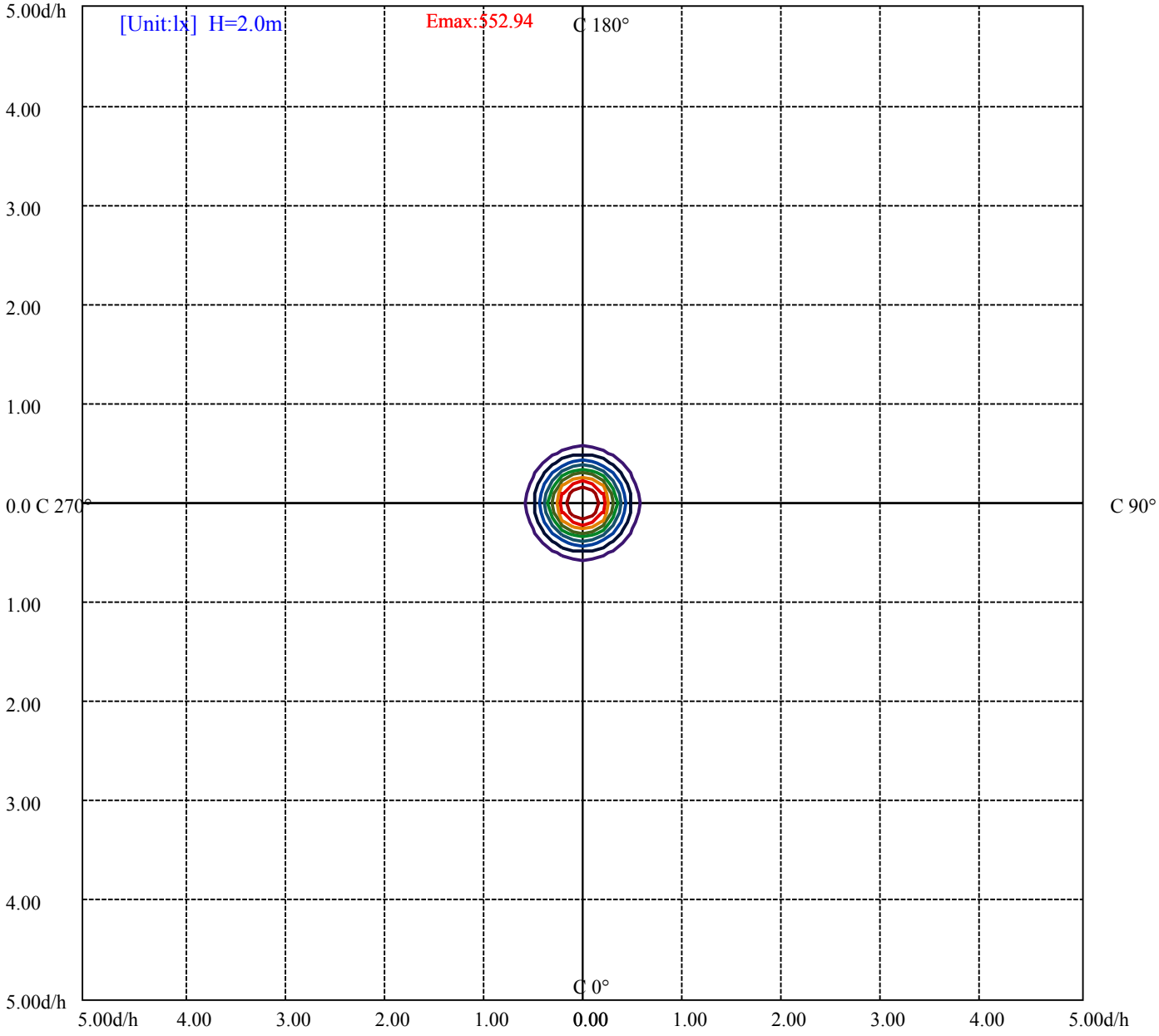
House [Unit:cd] Road

Imax:2211.74

(10%Imax) 221.174
(20%Imax) 442.347
(30%Imax) 663.521
(40%Imax) 884.694
(50%Imax) 1105.87
(60%Imax) 1327.04
(70%Imax) 1548.22
(80%Imax) 1769.39
(90%Imax) 1990.56

Equipment: GMS1980 Date: 2023/7/18 Operator: NT07
Temperature(°C): 25.0 Humidity(%): 60.0% Distance(m): 7.44

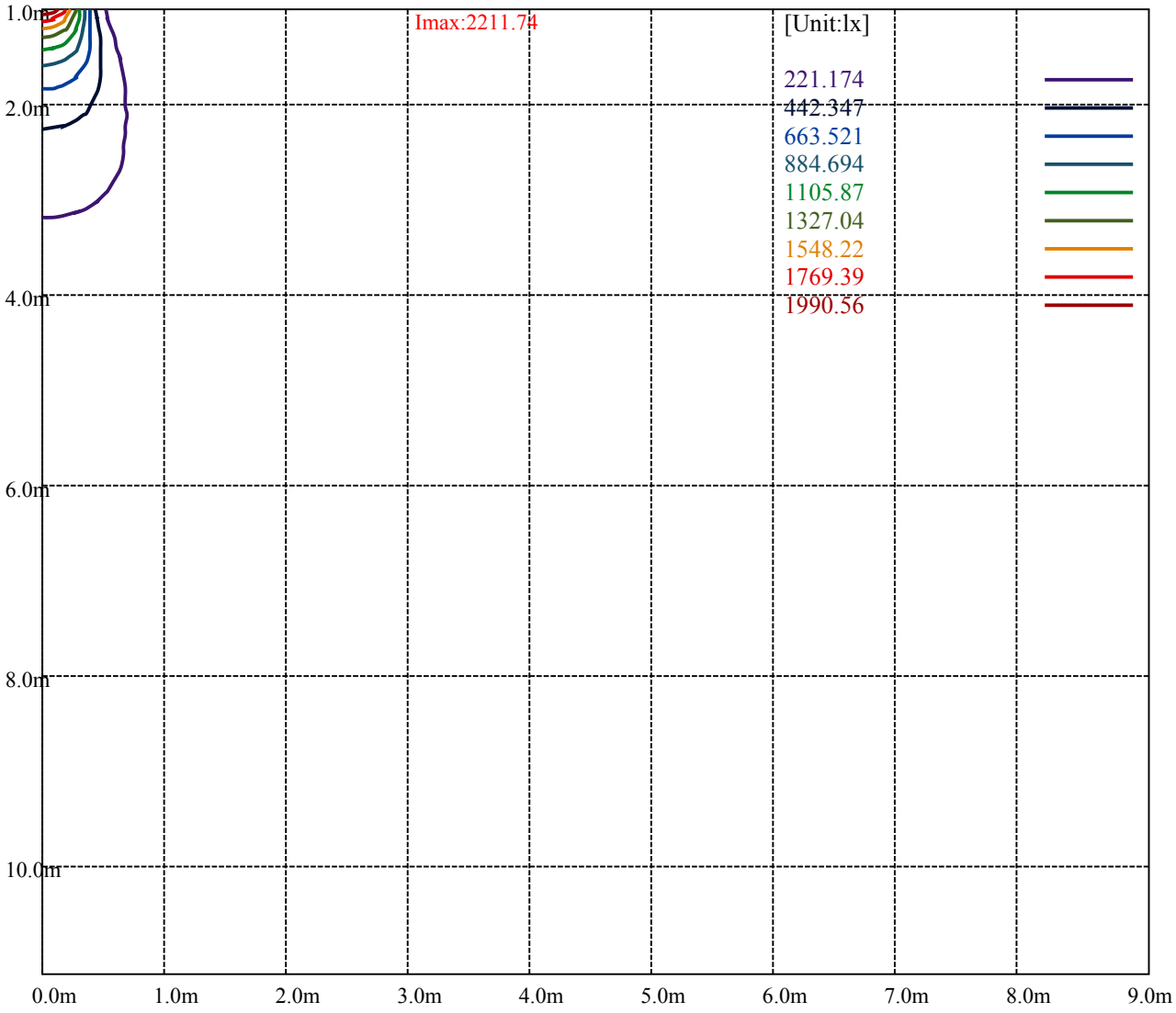
ISO illuminance diagram



(10%Emax) 55.2935
(20%Emax) 110.5867
(30%Emax) 165.8802
(40%Emax) 221.1735
(50%Emax) 276.4675
(60%Emax) 331.76
(70%Emax) 387.055
(80%Emax) 442.3475
(90%Emax) 497.64

Equipment: GMS1980
Temperature(°C): 25.0
Date: 2023/7/18
Humidity(%): 60.0%
Operator: NT07
Distance(m): 7.44

Space ISO Lux diagram



Equipment: GMS1980
Temperature(°C): 25.0

Date: 2023/7/18
Humidity(%): 60.0%

Operator: NT07
Distance(m): 7.44

Luminance Limitting Curve(no luminous side)

Luminance Table

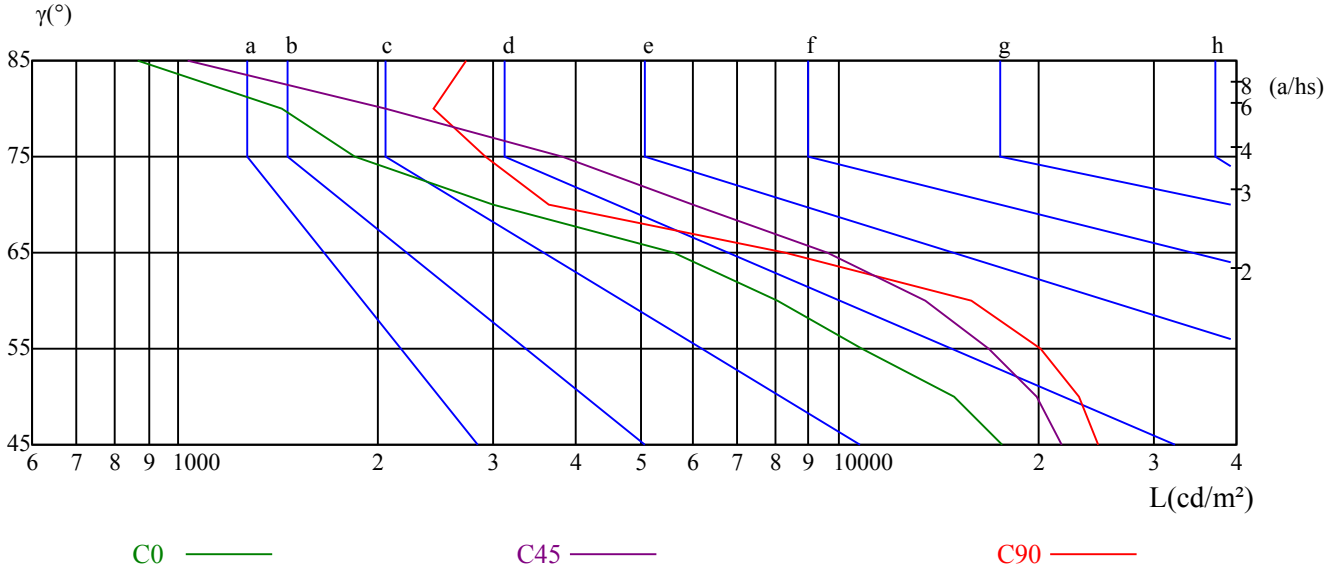
γ	45	50	55	60	65	70	75	80	85
C0	17707	14902	10843	8081	5637	2993	1851	1437	868
C45	21736	19918	16903	13532	9602	6004	3809	2064	1031
C90	24698	23118	20255	15854	8293	3645	2908	2436	2724

L(Hor)(65)	L(Ver)(65)	L45(65)	L(Hor)(75)	L(Ver)(75)	L45(75)	L(Hor)(85)	L(Ver)(85)	L45(85)
10642	10437	15758	4678	3676	7686	4962	3969	5458

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

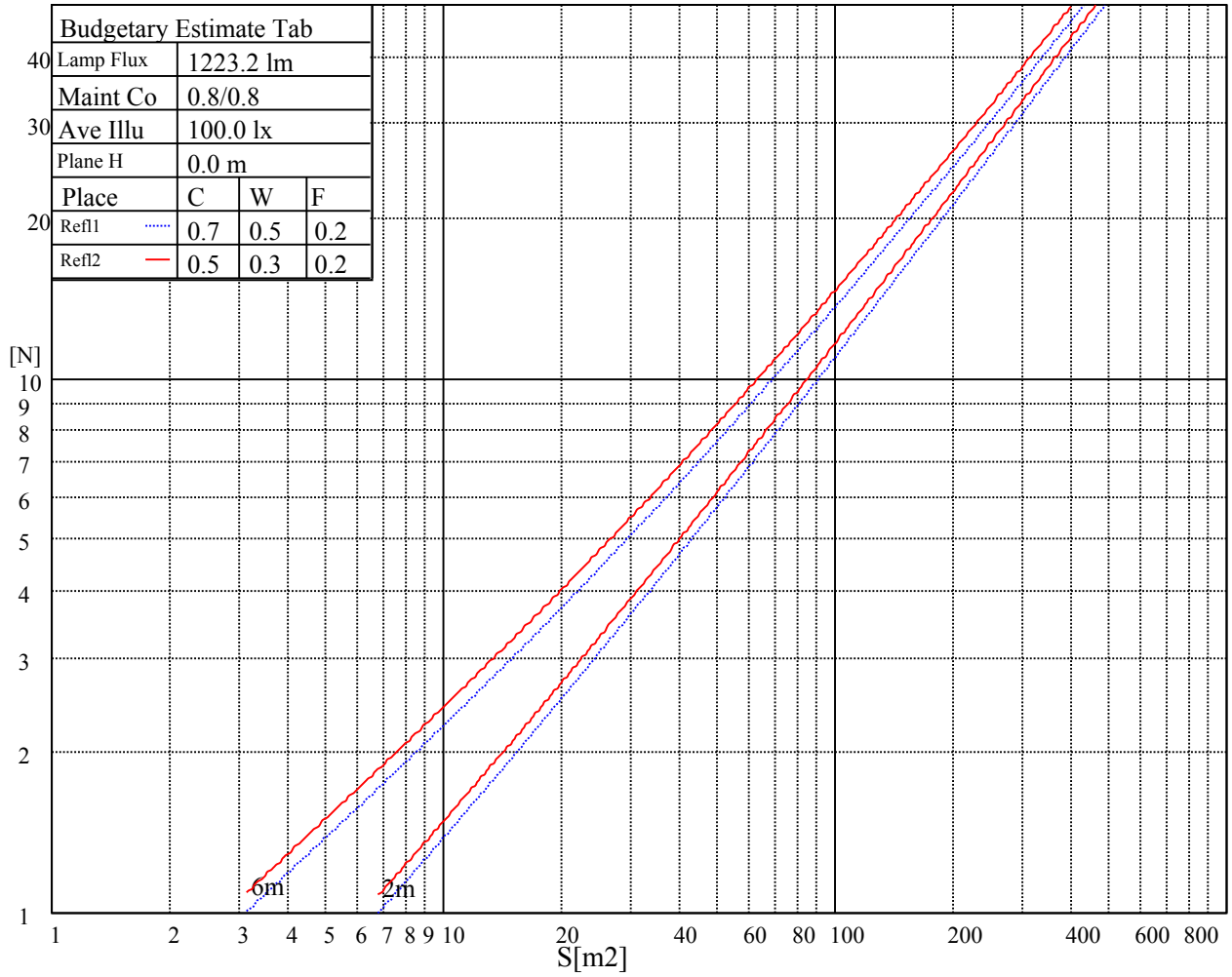
Luminance Limitting Curve



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

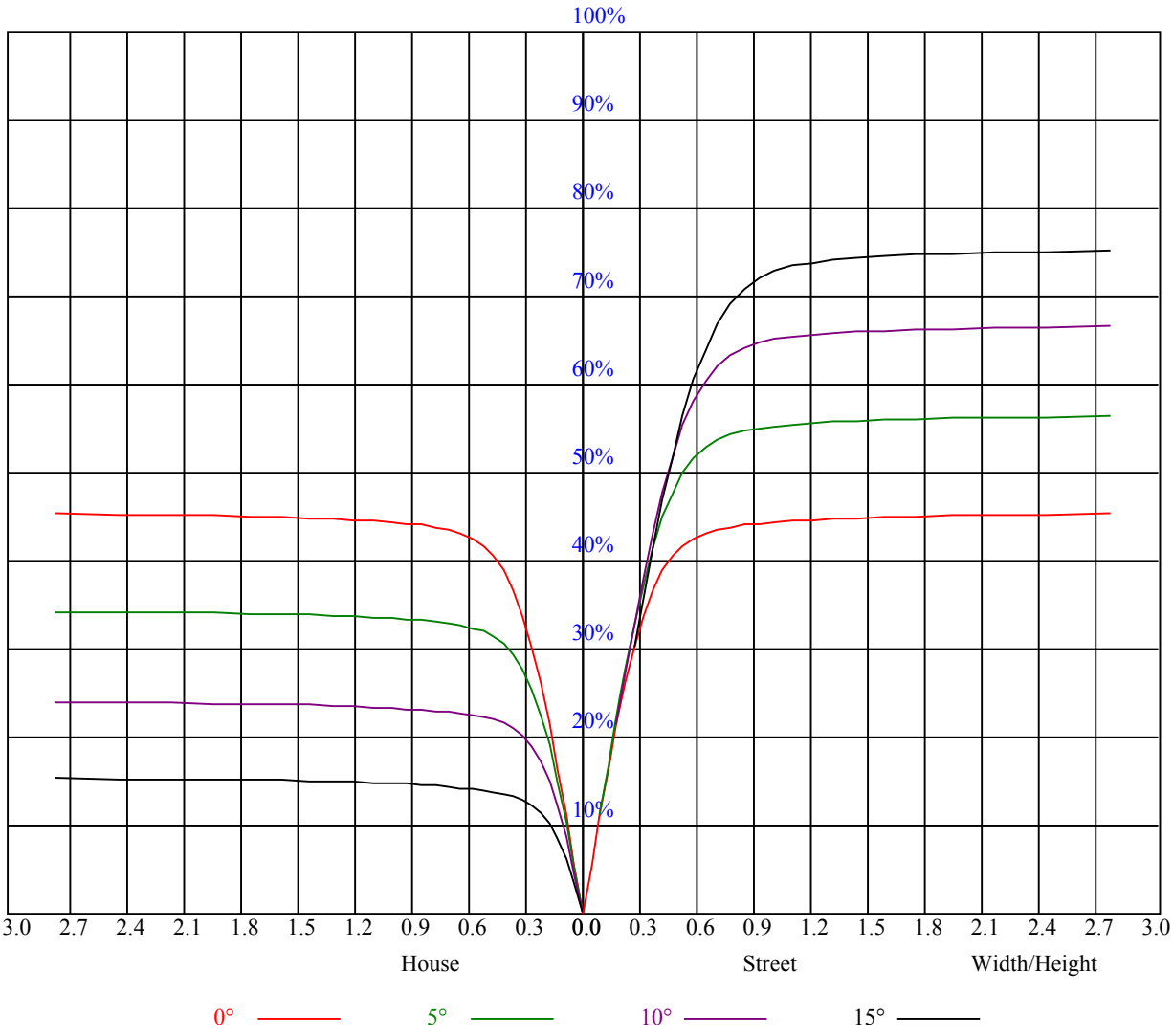


Equipment: GMS1980 Date: 2023/7/18 Operator: NT07
Temperature(°C): 25.0 Humidity(%): 60.0% Distance(m): 7.44

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	1.02	1.02	1.02	0.97	0.97	0.97	0.93	0.93	0.93	0.91
1	1.02	0.99	0.98	1.00	0.98	0.96	0.96	0.94	0.93	0.93	0.91	0.90	0.89	0.89	0.88	0.86
2	0.95	0.92	0.89	0.94	0.91	0.88	0.91	0.88	0.86	0.88	0.86	0.84	0.86	0.84	0.83	0.81
3	0.90	0.86	0.83	0.89	0.85	0.82	0.86	0.83	0.81	0.84	0.82	0.79	0.82	0.80	0.78	0.77
4	0.85	0.81	0.77	0.84	0.80	0.77	0.82	0.79	0.76	0.81	0.78	0.75	0.79	0.76	0.74	0.73
5	0.81	0.76	0.73	0.80	0.76	0.73	0.79	0.75	0.72	0.77	0.74	0.71	0.76	0.73	0.71	0.69
6	0.77	0.72	0.69	0.76	0.72	0.69	0.75	0.71	0.68	0.74	0.70	0.68	0.73	0.70	0.67	0.66
7	0.74	0.69	0.65	0.73	0.69	0.65	0.72	0.68	0.65	0.71	0.67	0.65	0.70	0.67	0.64	0.63
8	0.70	0.66	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	0.60
9	0.67	0.63	0.60	0.67	0.63	0.60	0.66	0.62	0.59	0.65	0.62	0.59	0.65	0.61	0.59	0.58
10	0.65	0.60	0.57	0.64	0.60	0.57	0.64	0.60	0.57	0.63	0.59	0.57	0.62	0.59	0.57	0.56

Coefficient Utilization Curve



Equipment: GMS1980	Date: 2023/7/18	Operator: NT07
Temperature(°C): 25.0	Humidity(%): 60.0%	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	2214.64	2215.75	2217.96	2212.43	2208.55	2195.27	2182.54	2163.72	2133.83
45.0	2212.43	2212.98	2207.45	2210.21	2201.36	2197.48	2185.30	2169.81	2148.77
90.0	2208.55	2199.14	2200.80	2193.61	2180.32	2165.38	2150.99	2118.33	2090.10
135.0	2211.32	2207.45	2200.25	2192.50	2178.66	2162.06	2147.11	2125.52	2100.61
180.0	2214.64	2216.86	2205.79	2193.05	2183.09	2168.15	2143.24	2128.84	2112.24
225.0	2212.43	2209.66	2197.48	2182.54	2167.59	2152.09	2137.15	2116.67	2092.86
270.0	2208.55	2212.98	2208.00	2200.80	2190.29	2177.00	2161.50	2149.32	2129.95
315.0	2211.32	2210.21	2209.11	2203.02	2197.48	2186.97	2172.02	2163.16	2139.91
360.0	2214.64	2215.75	2217.96	2212.43	2208.55	2195.27	2182.54	2163.72	2133.83

C/γ(°)	9.0	10.0	11.0	12.0	13.0	14.0	15.0	16.0	17.0
0.0	2092.86	2051.35	1990.46	1930.12	1860.93	1755.76	1656.68	1555.93	1429.17
45.0	2119.43	2088.99	2036.96	1987.14	1924.59	1853.18	1741.92	1640.07	1517.19
90.0	2053.56	1996.00	1939.53	1872.56	1798.94	1689.89	1591.36	1496.15	1397.62
135.0	2059.65	2024.23	1978.84	1910.20	1848.75	1774.58	1695.98	1601.32	1486.19
180.0	2084.01	2048.03	2013.16	1967.77	1900.79	1839.90	1770.15	1685.46	1581.40
225.0	2060.21	2009.83	1966.66	1912.97	1838.79	1767.94	1687.12	1574.75	1483.42
270.0	2106.70	2069.06	2035.30	1992.67	1929.02	1869.24	1805.58	1701.51	1619.04
315.0	2101.72	2070.17	2026.99	1963.89	1905.77	1819.42	1735.28	1646.16	1542.65
360.0	2092.86	2051.35	1990.46	1930.12	1860.93	1755.76	1656.68	1555.93	1429.17

C/γ(°)	18.0	19.0	20.0	21.0	22.0	23.0	24.0	25.0	26.0
0.0	1326.77	1077.40	1077.40	970.24	867.17	768.20	671.99	570.09	494.31
45.0	1412.01	1306.84	1175.10	1068.82	960.33	855.16	735.04	644.81	561.78
90.0	1086.87	1086.87	1061.07	932.82	833.74	737.59	628.26	548.17	473.16
135.0	1395.41	1275.85	1177.32	1074.91	949.26	855.71	738.36	651.46	570.09
180.0	1485.64	1392.09	1276.95	1188.39	1086.54	959.78	873.98	778.77	670.83
225.0	1390.98	1097.83	1097.83	1072.86	976.82	861.03	771.91	687.49	606.84
270.0	1518.29	1418.10	1297.99	1203.33	1095.39	988.56	870.66	772.13	676.37
315.0	1414.78	1233.78	1092.51	1092.51	961.88	862.19	768.86	677.97	575.18
360.0	1326.77	1077.40	1077.40	970.24	867.17	768.20	671.99	570.09	494.31

C/γ(°)	27.0	28.0	29.0	30.0	31.0	32.0	33.0	34.0	35.0
0.0	422.79	345.13	289.67	240.46	187.48	152.39	123.88	96.20	81.70
45.0	484.84	412.33	334.83	280.03	280.03	178.46	146.35	119.45	95.93
90.0	389.14	328.58	275.33	226.89	175.80	143.31	116.46	98.20	82.42
135.0	491.48	420.08	340.92	285.02	285.02	225.40	146.80	120.01	100.96
180.0	591.67	515.84	444.99	364.17	306.60	293.32	293.32	155.93	127.15
225.0	513.07	442.16	376.02	301.62	249.53	203.54	156.98	126.98	100.41
270.0	577.84	503.11	417.31	354.76	296.64	283.36	221.69	151.78	123.99
315.0	499.95	431.37	351.66	294.59	234.92	193.68	158.86	129.14	102.02
360.0	422.79	345.13	289.67	240.46	187.48	152.39	123.88	96.20	81.70

C/γ(°)	36.0	37.0	38.0	39.0	40.0	41.0	42.0	43.0	44.0
0.0	71.85	64.60	56.29	51.20	46.94	43.07	38.86	35.87	33.21
45.0	83.36	72.90	65.70	59.45	53.31	49.10	45.33	41.90	38.14
90.0	74.12	66.54	58.62	53.58	48.10	44.28	40.68	36.81	33.93
135.0	86.96	75.50	67.42	59.01	53.64	49.04	43.95	40.35	37.20
180.0	105.89	87.02	77.11	66.81	59.78	54.03	48.10	44.06	40.41
225.0	85.58	74.95	66.81	59.78	52.48	47.66	43.45	39.80	35.65
270.0	102.46	84.41	74.95	67.86	61.11	54.14	49.43	45.33	40.74
315.0	87.07	76.89	69.52	61.06	55.52	50.81	46.72	42.07	38.80
360.0	71.85	64.60	56.29	51.20	46.94	43.07	38.86	35.87	33.21

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	30.22	28.12	25.96	24.41	23.03	21.81	20.37	19.37	18.43
45.0	35.43	32.88	30.67	28.78	26.63	25.02	23.36	22.14	20.98
90.0	31.44	29.23	26.90	25.24	23.75	22.36	20.87	19.76	18.82
135.0	33.60	31.11	28.89	26.96	25.24	23.30	21.98	20.81	19.43
180.0	37.20	33.65	31.16	28.95	27.07	25.02	23.64	22.25	20.76
225.0	32.88	30.28	27.57	25.68	23.64	22.20	20.98	19.54	18.49
270.0	37.53	34.65	31.39	29.12	26.79	25.13	23.69	22.31	20.76
315.0	35.09	32.55	30.22	27.73	26.02	24.41	23.03	21.37	20.20
360.0	30.22	28.12	25.96	24.41	23.03	21.81	20.37	19.37	18.43

C/γ(°)	54.0	55.0	56.0	57.0	58.0	59.0	60.0	61.0	62.0
0.0	17.55	16.61	15.89	15.22	14.50	13.95	13.40	12.84	12.40
45.0	19.71	18.76	17.93	16.94	16.16	15.50	14.83	14.06	13.56
90.0	17.66	16.83	16.05	15.17	14.50	13.95	13.28	12.73	12.29
135.0	18.43	17.55	16.61	15.89	15.06	14.39	13.84	13.34	12.73
180.0	19.71	18.76	17.66	16.88	16.16	15.33	14.72	14.17	13.62
225.0	17.55	16.72	15.78	15.11	14.50	13.89	13.23	12.79	12.34
270.0	19.65	18.65	17.71	16.72	16.00	15.33	14.50	13.95	13.40
315.0	19.15	18.16	17.10	16.38	15.67	14.83	14.28	13.67	13.06
360.0	17.55	16.61	15.89	15.22	14.50	13.95	13.40	12.84	12.40

C/γ(°)	63.0	64.0	65.0	66.0	67.0	68.0	69.0	70.0	71.0
0.0	11.96	11.51	11.13	10.74	10.35	10.02	9.69	9.41	9.02
45.0	13.01	12.51	11.96	11.57	11.13	10.68	10.30	9.85	9.52
90.0	11.85	11.35	10.96	10.63	10.24	9.80	9.47	9.19	8.80
135.0	12.23	11.79	11.46	10.96	10.57	10.24	9.85	9.52	9.19
180.0	13.06	12.57	12.12	11.73	11.29	10.96	10.57	10.19	9.85
225.0	11.79	11.40	11.02	10.63	10.30	9.91	9.58	9.24	9.02
270.0	12.79	12.34	11.90	11.40	11.02	10.68	10.35	9.91	9.58
315.0	12.51	11.96	11.57	11.18	10.85	10.41	10.02	9.69	9.35
360.0	11.96	11.51	11.13	10.74	10.35	10.02	9.69	9.41	9.02

C/γ(°)	72.0	73.0	74.0	75.0	76.0	77.0	78.0	79.0	80.0
0.0	8.75	8.41	8.14	7.80	7.47	7.25	6.86	6.59	6.25
45.0	9.19	8.86	8.47	8.19	7.86	7.58	7.25	6.92	6.64
90.0	8.52	8.14	7.86	7.58	7.31	6.97	6.70	6.42	6.14
135.0	8.86	8.52	8.25	7.92	7.69	7.42	7.09	6.81	6.53
180.0	9.47	9.19	8.86	8.58	8.25	7.92	7.64	7.31	6.97
225.0	8.75	8.41	8.14	7.86	7.58	7.31	7.03	6.75	6.42
270.0	9.30	9.02	8.58	8.36	8.03	7.75	7.42	7.14	6.81
315.0	8.97	8.69	8.41	8.14	7.75	7.42	7.14	6.86	6.59
360.0	8.75	8.41	8.14	7.80	7.47	7.25	6.86	6.59	6.25

C/γ(°)	81.0	82.0	83.0	84.0	85.0	86.0	87.0	88.0	89.0
0.0	6.03	5.87	5.65	5.42	5.26	5.04	4.93	4.76	4.71
45.0	6.31	6.09	5.81	5.59	5.42	5.20	5.04	4.87	4.71
90.0	5.92	5.70	5.54	5.37	5.15	4.98	4.82	4.71	4.65
135.0	6.25	5.98	5.76	5.54	5.31	5.09	4.98	4.82	4.65
180.0	6.64	6.37	6.09	5.87	5.65	5.48	5.31	5.09	4.93
225.0	6.20	5.98	5.76	5.59	5.37	5.20	5.04	4.93	4.76
270.0	6.53	6.25	6.03	5.81	5.59	5.37	5.20	4.98	4.82
315.0	6.25	6.09	5.81	5.59	5.42	5.20	4.98	4.87	4.71
360.0	6.03	5.87	5.65	5.42	5.26	5.04	4.93	4.76	4.71

Intensity data(cd)

C/γ(°)	90.0
0.0	4.71
45.0	4.71
90.0	4.65
135.0	4.59
180.0	4.76
225.0	4.65
270.0	4.71
315.0	4.59
360.0	4.71