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: 1-1339-M
Luminaire: 92.70.131.00
Report No: 20230302-B008
Ballast type: AC

Test No: 20230302-C008	Voltage(V): 35.350
LampCAT: CITIZEN CLU038	Current(A): 0.480
Lamp flux(lm): 2159.6	Power (W): 16.968
Number of Lamps: 1	PF: 0.000
Length(mm): 0	Width(mm): 0
Phm Type: C	Height(mm): 0

Photometric Results

Lumens(lm): 2004.34, Efficiency(%): 92.81% , Luminous Efficacy(lm/W): 118.12
Central intensity(cd): 3901.715, Maximum intensity(cd): 3901.715
Angle of maximum intensity: C=0.0 γ=0.0
Beam Angle(50%Imax): [C0/180]Total=29.8
[C90/270]Total=29.8
Field angle(10%Imax): [C0/180]Total=86.0
[C90/270]Total=86.0
Beam angle of C0 plane : 29.72
Aveage BeamAngle(IEC 61341):29.72
Maximum s/h(1/2): C0_180=0.49 C90_270=0.49
Maximum s/h(1/4): C0_180=0.54 C90_270=0.54
Up flux rate of lamp(%): 0.00%
Down flux rate of lamp(%): 92.81%
Up flux rate of LUM(%): - -
Down flux rate of LUM(%): 100.00%
CIE Type : Direct lighting
Output flux ratio in π solid angle : 98.745%

Zonal flux distribution table

γ(°)	Average I(cd)	Zonal F(lm)	Sum F(lm)	Eff Flux(%)	Eff Sum(%)
0.0	3901.715	0.000	0	0.00%	0.00%
1.0	3894.545	3.730	3.73	0.17%	0.19%
2.0	3881.548	11.161	14.891	0.52%	0.74%
3.0	3858.842	18.512	33.404	0.86%	1.67%
4.0	3821.273	25.708	59.112	1.19%	2.95%
5.0	3763.238	32.628	91.74	1.51%	4.58%
6.0	3669.351	39.060	130.8	1.81%	6.53%
7.0	3547.604	44.796	175.596	2.07%	8.76%
8.0	3396.280	49.696	225.292	2.30%	11.24%
9.0	3208.955	53.532	278.823	2.48%	13.91%
10.0	2982.865	56.034	334.857	2.59%	16.71%
11.0	2763.721	57.420	392.277	2.66%	19.57%
12.0	2549.880	58.085	450.363	2.69%	22.47%
13.0	2308.105	57.652	508.015	2.67%	25.35%
14.0	2103.153	56.464	564.478	2.61%	28.16%
15.0	1926.284	55.318	619.796	2.56%	30.92%
16.0	1759.499	54.007	673.803	2.50%	33.62%
17.0	1599.585	52.310	726.113	2.42%	36.23%
18.0	1471.714	50.639	776.752	2.34%	38.75%
19.0	1362.254	49.305	826.058	2.28%	41.21%
20.0	1263.453	48.058	874.115	2.23%	43.61%
21.0	1173.943	46.803	920.918	2.17%	45.95%
22.0	1095.188	45.599	966.517	2.11%	48.22%
23.0	1035.929	44.717	1011.234	2.07%	50.45%
24.0	973.838	43.941	1055.175	2.03%	52.64%
25.0	921.449	43.095	1098.269	2.00%	54.79%
26.0	878.614	42.491	1140.76	1.97%	56.91%
27.0	838.460	42.009	1182.769	1.95%	59.01%
28.0	800.905	41.505	1224.274	1.92%	61.08%
29.0	770.469	41.112	1265.386	1.90%	63.13%
30.0	744.282	40.898	1306.283	1.89%	65.17%
31.0	718.461	40.706	1346.99	1.88%	67.20%
32.0	695.591	40.511	1387.5	1.88%	69.22%
33.0	676.649	40.427	1427.927	1.87%	71.24%
34.0	658.014	40.391	1468.318	1.87%	73.26%
35.0	638.885	40.277	1508.595	1.87%	75.27%
36.0	619.399	40.064	1548.659	1.86%	77.27%
37.0	596.543	39.657	1588.316	1.84%	79.24%

Zonal flux distribution table

γ(°)	Average I(cd)	Zonal F(lm)	Sum F(lm)	Eff Flux(%)	Eff Sum(%)
38.0	572.104	39.008	1627.324	1.81%	81.19%
39.0	540.846	37.988	1665.312	1.76%	83.09%
40.0	506.376	36.523	1701.835	1.69%	84.91%
41.0	471.801	34.832	1736.668	1.61%	86.65%
42.0	431.446	32.817	1769.484	1.52%	88.28%
43.0	390.381	30.443	1799.927	1.41%	89.80%
44.0	356.269	28.181	1828.108	1.30%	91.21%
45.0	311.940	25.680	1853.788	1.19%	92.49%
46.0	268.619	22.704	1876.492	1.05%	93.62%
47.0	231.475	19.890	1896.382	0.92%	94.61%
48.0	198.268	17.372	1913.755	0.80%	95.48%
49.0	156.112	14.553	1928.308	0.67%	96.21%
50.0	120.932	11.551	1939.859	0.53%	96.78%
51.0	92.049	9.011	1948.869	0.42%	97.23%
52.0	68.798	6.902	1955.772	0.32%	97.58%
53.0	51.246	5.222	1960.993	0.24%	97.84%
54.0	38.795	3.969	1964.962	0.18%	98.04%
55.0	31.057	3.118	1968.08	0.14%	98.19%
56.0	27.524	2.647	1970.727	0.12%	98.32%
57.0	25.612	2.429	1973.157	0.11%	98.44%
58.0	23.595	2.275	1975.432	0.11%	98.56%
59.0	20.107	2.043	1977.475	0.09%	98.66%
60.0	15.887	1.700	1979.176	0.08%	98.74%
61.0	14.206	1.436	1980.612	0.07%	98.82%
62.0	11.241	1.226	1981.838	0.06%	98.88%
63.0	8.231	0.947	1982.785	0.04%	98.92%
64.0	7.947	0.794	1983.579	0.04%	98.96%
65.0	7.865	0.783	1984.361	0.04%	99.00%
66.0	7.813	0.782	1985.144	0.04%	99.04%
67.0	7.753	0.783	1985.926	0.04%	99.08%
68.0	7.693	0.782	1986.709	0.04%	99.12%
69.0	7.671	0.784	1987.493	0.04%	99.16%
70.0	7.633	0.786	1988.279	0.04%	99.20%
71.0	7.626	0.789	1989.067	0.04%	99.24%
72.0	7.589	0.791	1989.858	0.04%	99.28%
73.0	7.566	0.792	1990.651	0.04%	99.32%
74.0	7.566	0.796	1991.446	0.04%	99.36%
75.0	7.544	0.798	1992.245	0.04%	99.40%

Zonal flux distribution table

γ(°)	Average I(cd)	Zonal F(lm)	Sum F(lm)	Eff Flux(%)	Eff Sum(%)
76.0	7.544	0.801	1993.046	0.04%	99.44%
77.0	7.521	0.803	1993.849	0.04%	99.48%
78.0	7.492	0.804	1994.652	0.04%	99.52%
79.0	7.477	0.804	1995.457	0.04%	99.56%
80.0	7.469	0.806	1996.262	0.04%	99.60%
81.0	7.462	0.807	1997.07	0.04%	99.64%
82.0	7.462	0.809	1997.879	0.04%	99.68%
83.0	7.447	0.810	1998.69	0.04%	99.72%
84.0	7.424	0.810	1999.5	0.04%	99.76%
85.0	7.394	0.809	2000.309	0.04%	99.80%
86.0	7.379	0.808	2001.116	0.04%	99.84%
87.0	7.350	0.806	2001.922	0.04%	99.88%
88.0	7.342	0.805	2002.727	0.04%	99.92%
89.0	7.342	0.805	2003.532	0.04%	99.96%
90.0	7.342	0.805	2004.337	0.04%	100.00%

Zonal flux distribution table

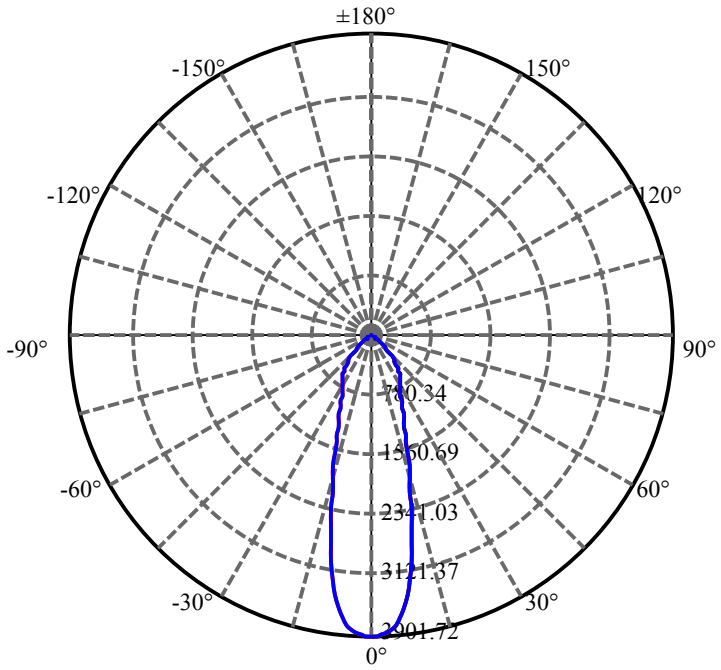
ZONAL LUMEN SUMMARY

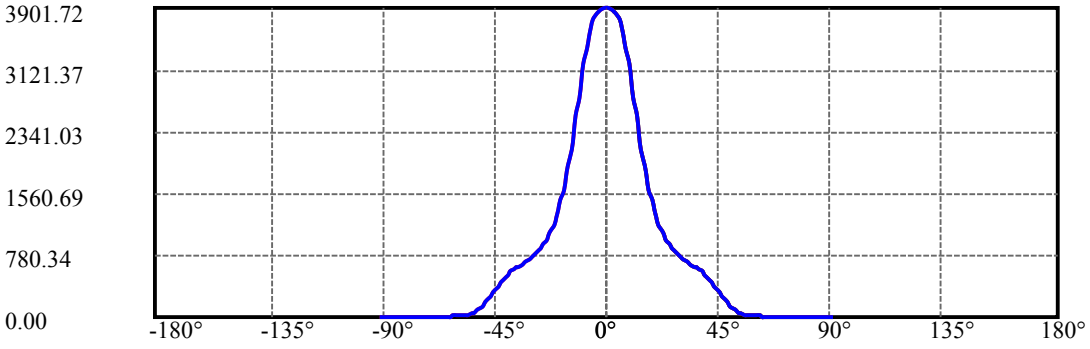
Zone	Lumens	%Lamp	%Fixt
0-30	1306.28	60.49%	65.17%
0-40	1701.84	78.80%	84.91%
0-60	1979.18	91.65%	98.74%
0-90	2003.53	92.77%	99.96%
0-120	2003.53	92.77%	99.96%
0-180	2004.34	92.81%	100.00%
60-90	24.36	1.13%	1.22%
90-120	0.00	0.00%	0.00%
90-130	0.00	0.00%	0.00%
90-150	0.00	0.00%	0.00%
90-180	0.00	0.00%	0.00%
0-37.39	1603.47	74.25%	80.00%

ZONAL LUMEN SUMMARY

0-10	334.86
10-20	539.26
20-30	432.17
30-40	395.55
40-50	238.02
50-60	39.32
60-70	9.10
70-80	7.98
80-90	7.27
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:

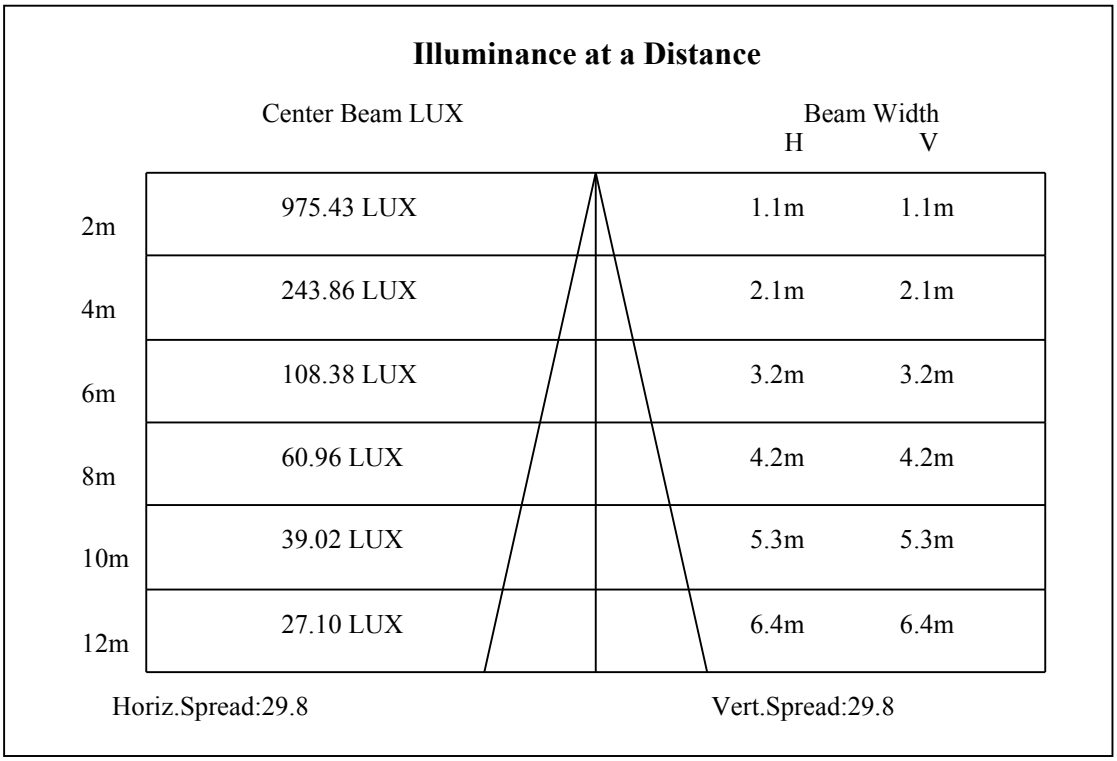
C90/C270:

Field angle(10%Imax):C0/180Left:43.0 Right:43.0
:C90/270Left:43.0 Right:43.0

Beam Angle(50%Imax):C0/180Left:14.9 Right:14.9
:C90/270Left:14.9 Right:14.9

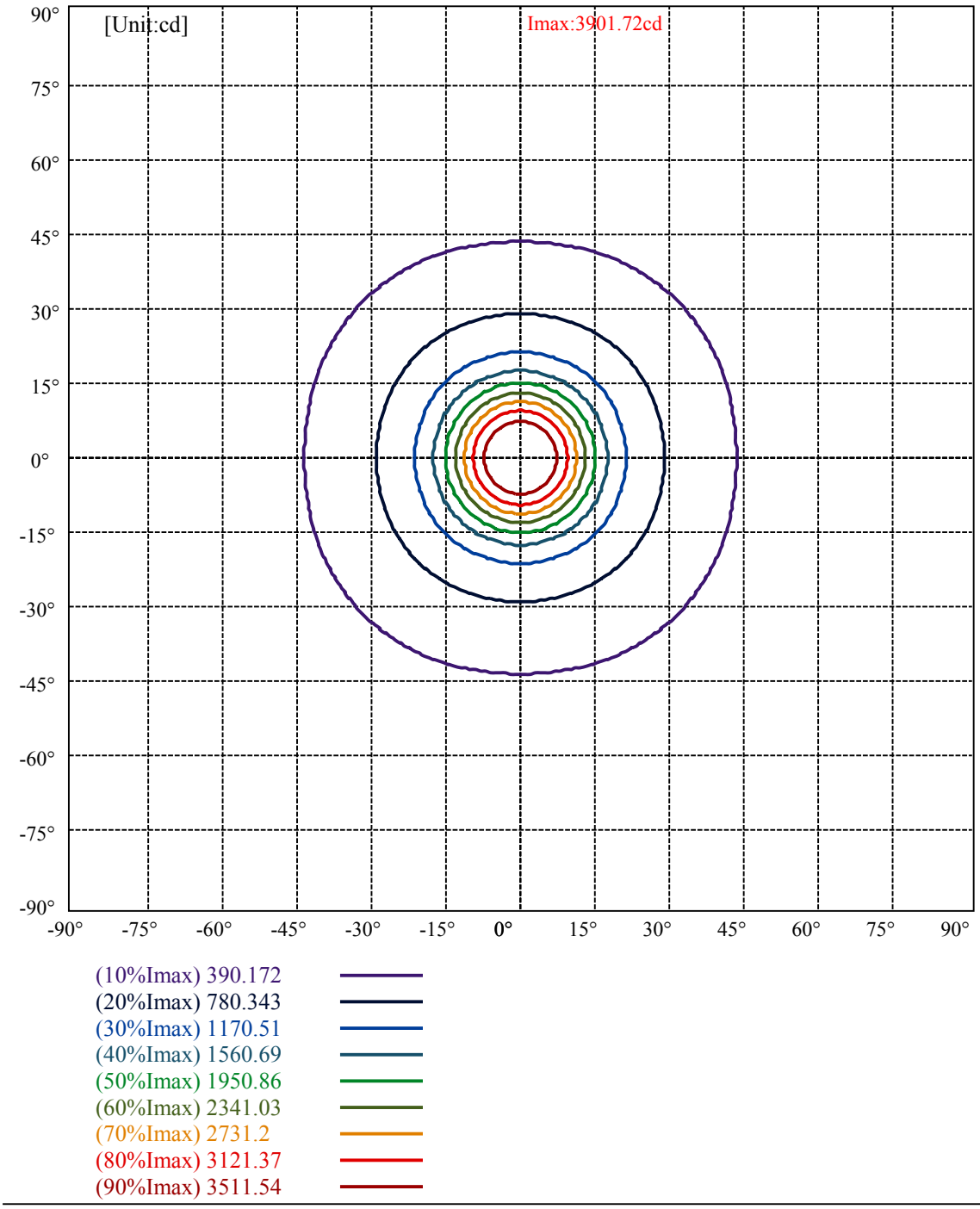
Equipment: GMS1980	Date: 2023/3/02	Operator: NT07
Temperature(°C): 25.0	Humidity(%): 60.0%	Distance(m): 7.73

Lux distance Curve



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

ISO-Intensity(V-H)

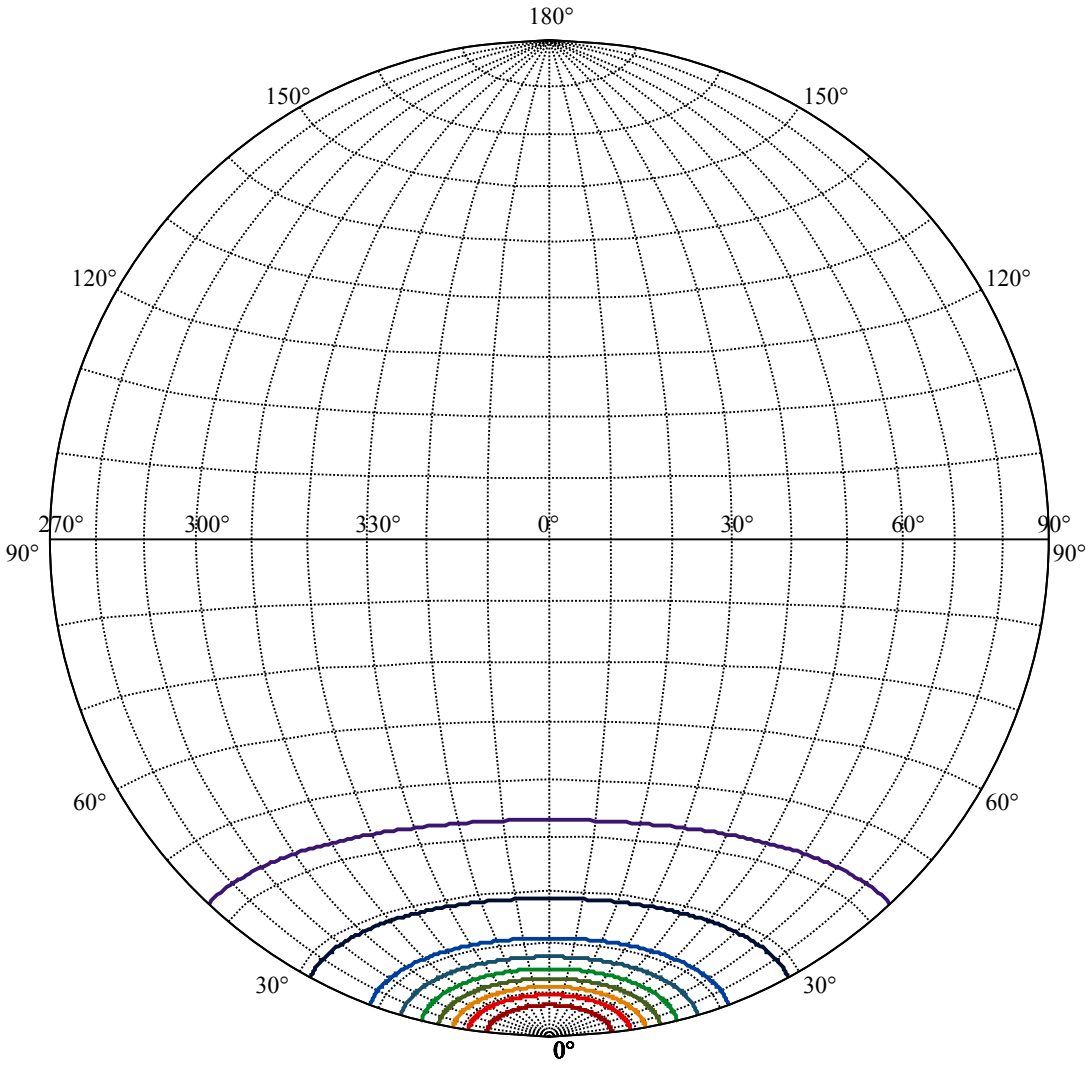


Equipment: GMS1980
Temperature(°C): 25.0

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

Operator: NT07
Distance(m): 7.73

ISO candela diagram on circular web



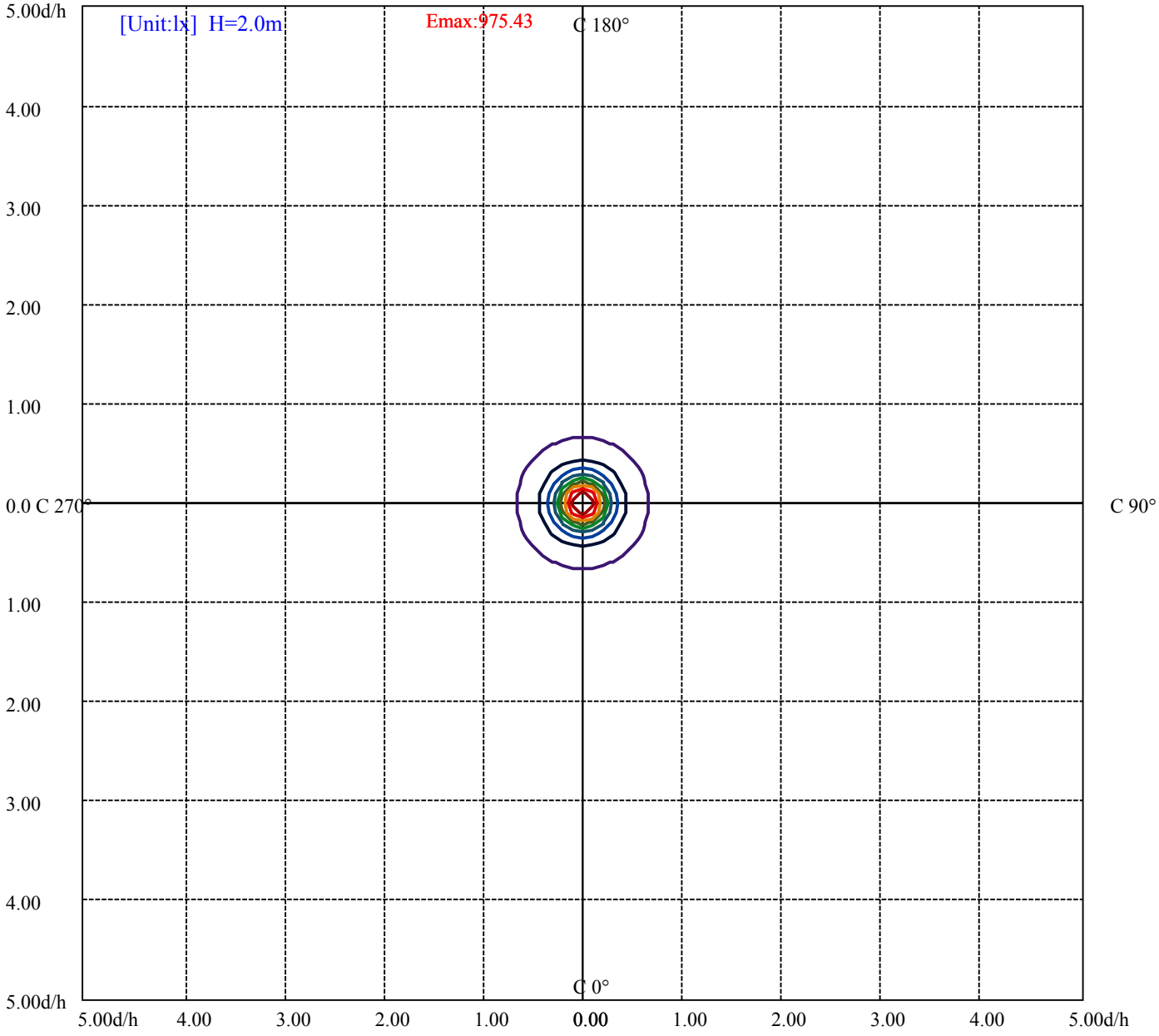
House [Unit:cd] Road

Imax:3901.72

(10%Imax) 390.172
(20%Imax) 780.343
(30%Imax) 1170.51
(40%Imax) 1560.69
(50%Imax) 1950.86
(60%Imax) 2341.03
(70%Imax) 2731.2
(80%Imax) 3121.37
(90%Imax) 3511.54

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

ISO illuminance diagram

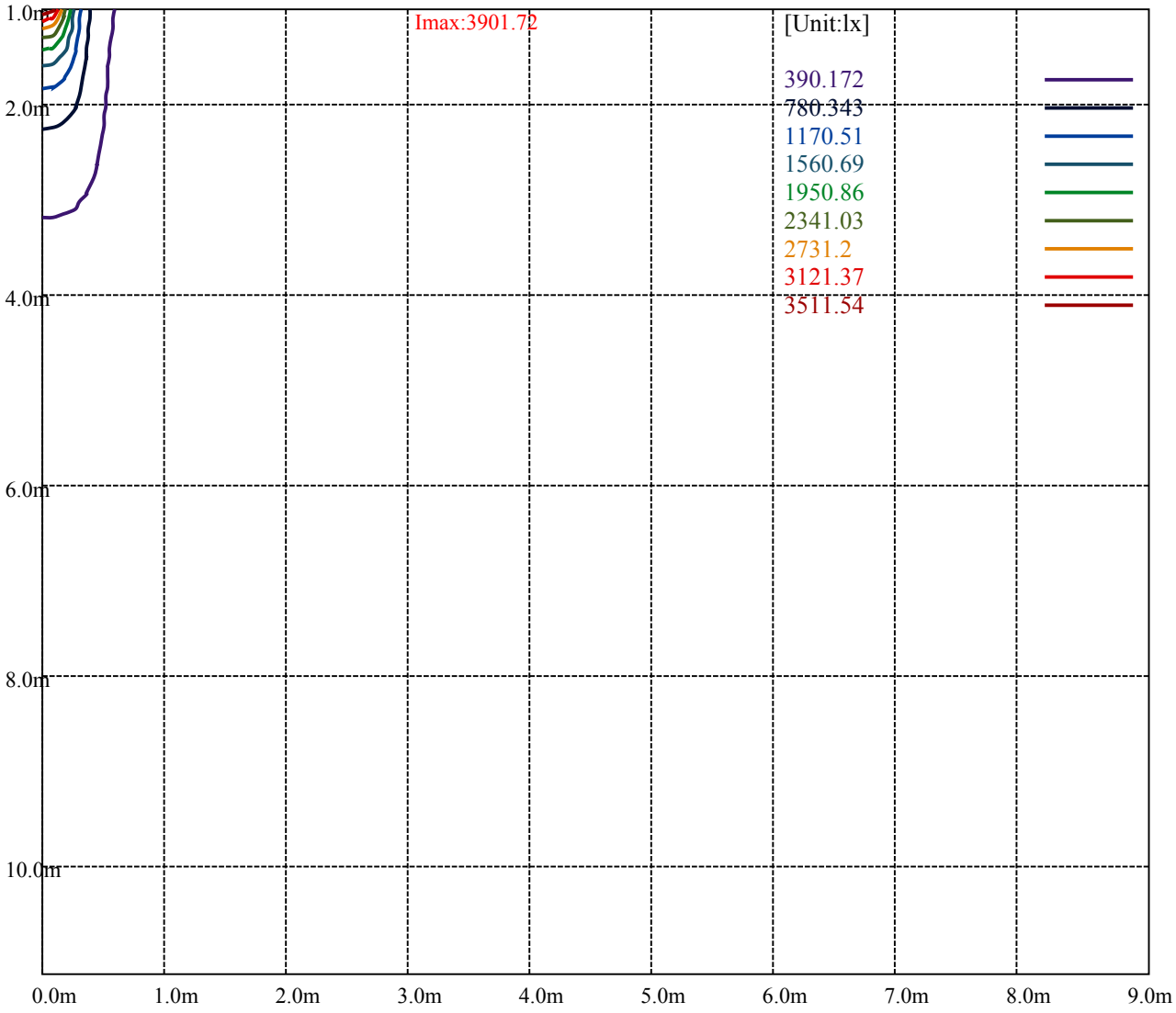


Equipment: GMS1980
Temperature(°C): 25.0

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

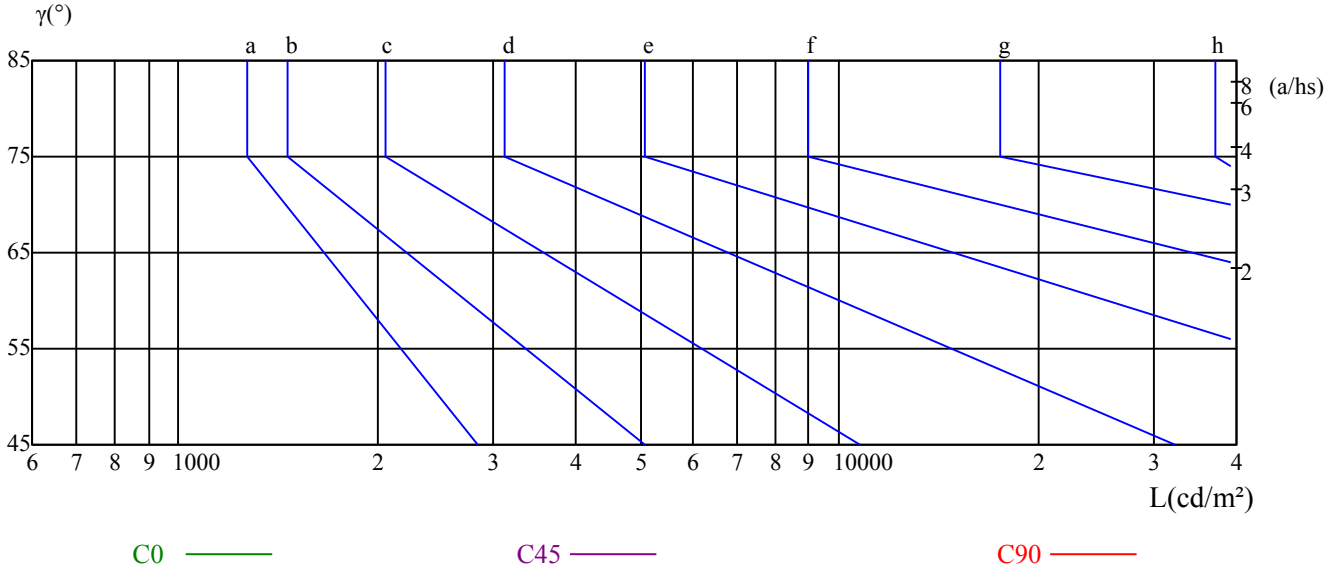
γ	45	50	55	60	65	70	75	80	85
C0	0	0	0	0	0	0	0	0	0
C45	0	0	0	0	0	0	0	0	0
C90	0	0	0	0	0	0	0	0	0

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

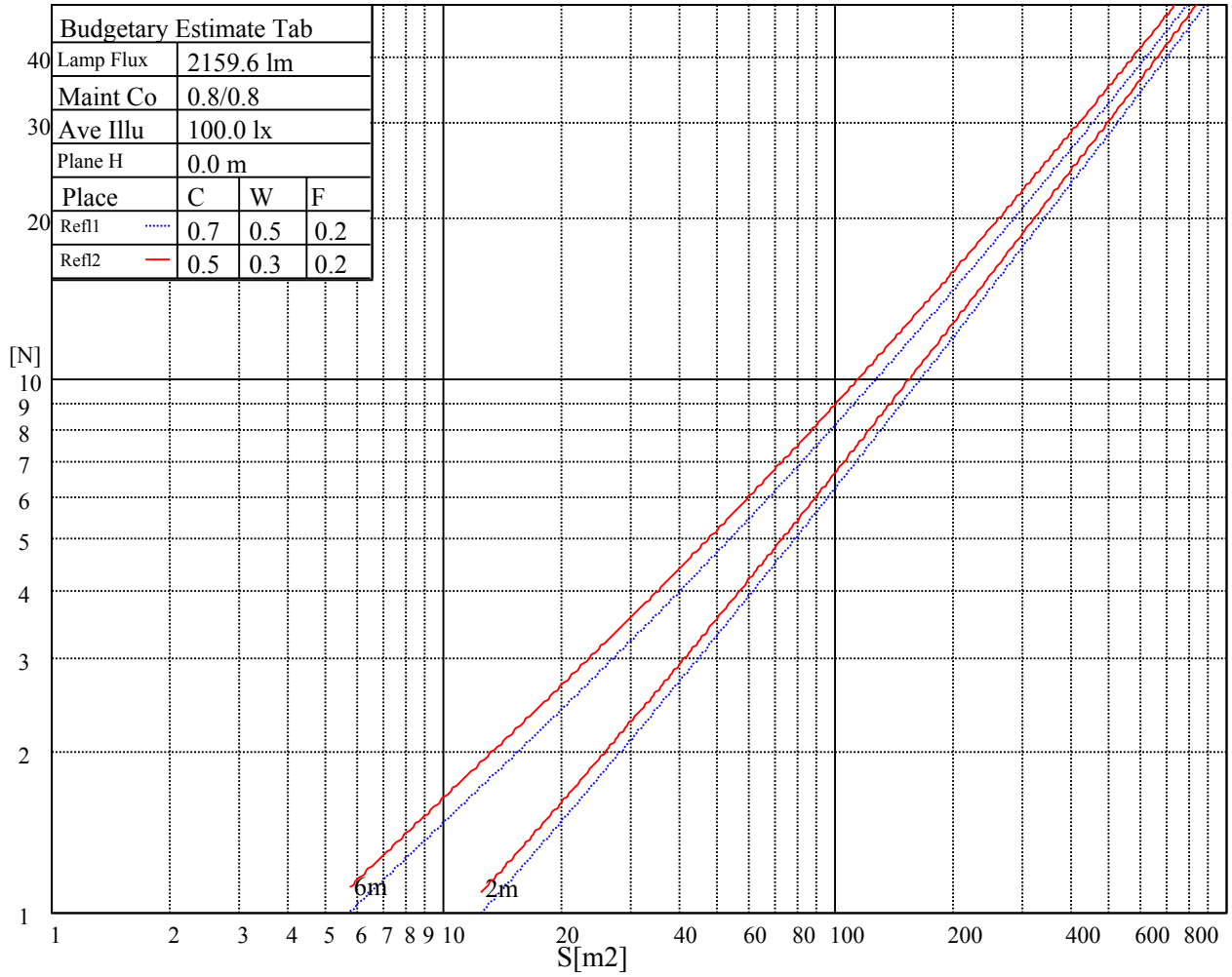
Luminance Limitting Curve



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

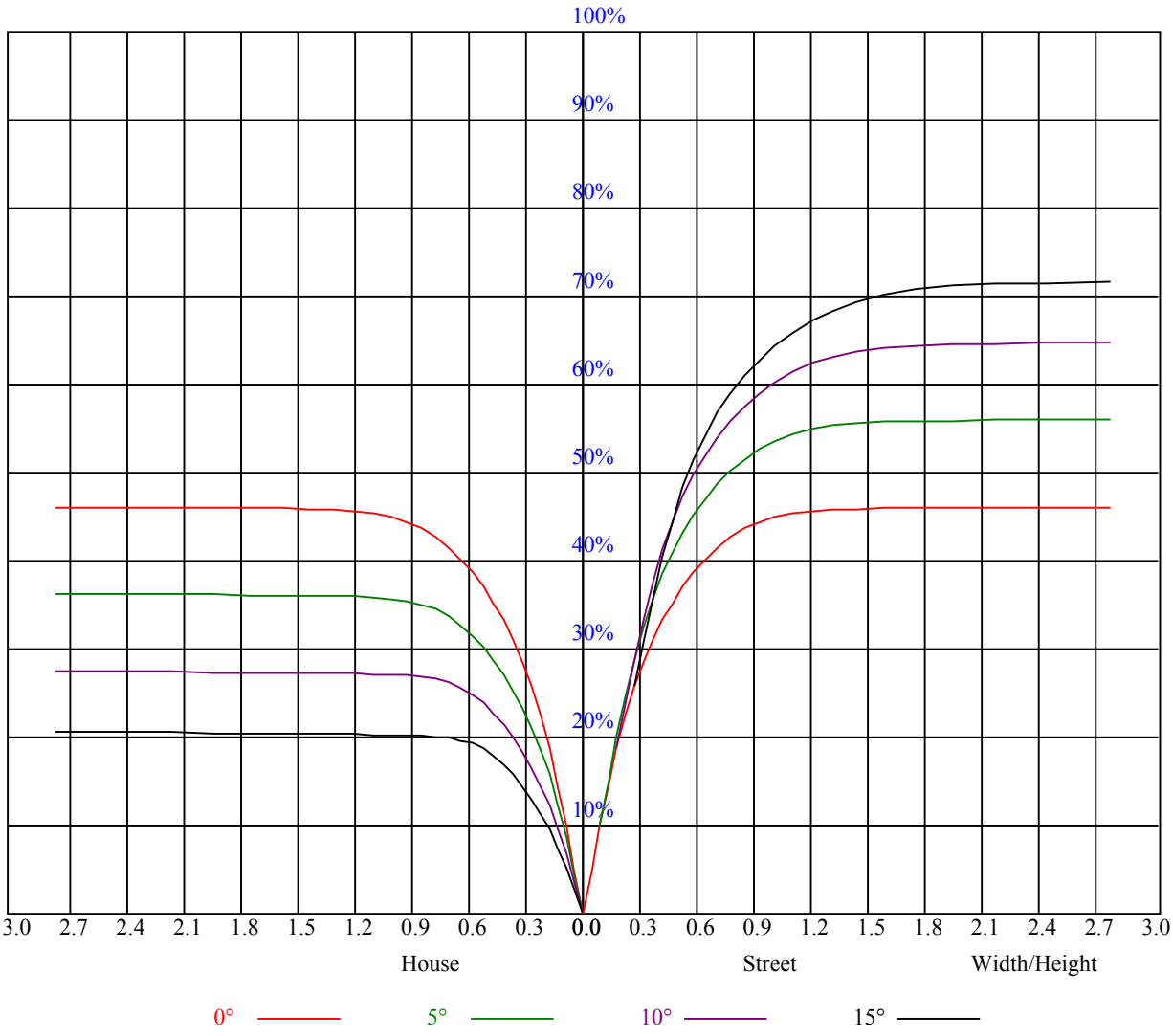


Equipment: GMS1980 Date: 2023/3/02 Operator: NT07
Temperature(°C): 25.0 Humidity(%): 60.0% Distance(m): 7.73

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	1.03	1.00	0.98	1.00	0.98	0.96	0.97	0.95	0.93	0.93	0.92	0.91	0.90	0.89	0.88	0.86
2	0.95	0.91	0.88	0.94	0.90	0.87	0.91	0.88	0.85	0.88	0.86	0.83	0.85	0.83	0.82	0.80
3	0.89	0.84	0.80	0.87	0.83	0.80	0.85	0.81	0.78	0.83	0.80	0.77	0.81	0.78	0.76	0.74
4	0.83	0.78	0.74	0.82	0.77	0.73	0.80	0.76	0.72	0.78	0.74	0.72	0.76	0.73	0.71	0.69
5	0.78	0.72	0.68	0.77	0.72	0.68	0.75	0.71	0.67	0.74	0.70	0.67	0.72	0.69	0.66	0.65
6	0.73	0.67	0.63	0.72	0.67	0.63	0.71	0.66	0.63	0.70	0.65	0.62	0.68	0.65	0.62	0.61
7	0.69	0.63	0.59	0.68	0.63	0.59	0.67	0.62	0.59	0.66	0.62	0.59	0.65	0.61	0.58	0.57
8	0.65	0.59	0.56	0.64	0.59	0.56	0.63	0.59	0.55	0.63	0.58	0.55	0.62	0.58	0.55	0.54
9	0.62	0.56	0.53	0.61	0.56	0.52	0.60	0.56	0.52	0.59	0.55	0.52	0.59	0.55	0.52	0.51
10	0.59	0.53	0.50	0.58	0.53	0.50	0.57	0.53	0.49	0.57	0.52	0.49	0.56	0.52	0.49	0.48

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	3902.46	3903.66	3912.62	3903.66	3875.57	3848.68	3812.83	3740.53	3622.82
45.0	3913.81	3898.88	3873.18	3829.56	3772.80	3701.69	3570.83	3420.85	3235.02
90.0	3889.91	3855.85	3837.93	3799.69	3717.23	3607.28	3467.46	3260.72	3047.40
135.0	3900.67	3881.55	3860.63	3820.60	3768.02	3694.52	3551.11	3388.59	3190.21
180.0	3902.46	3889.91	3857.65	3820.00	3775.19	3680.18	3537.97	3372.45	3145.39
225.0	3913.81	3909.63	3906.64	3901.27	3875.57	3845.70	3801.48	3718.42	3613.86
270.0	3889.91	3909.63	3899.47	3894.69	3900.07	3869.00	3811.64	3774.59	3699.90
315.0	3900.67	3907.24	3904.25	3901.27	3885.73	3858.84	3801.48	3704.68	3615.65
360.0	3902.46	3903.66	3912.62	3903.66	3875.57	3848.68	3812.83	3740.53	3622.82

C/γ(°)	9.0	10.0	11.0	12.0	13.0	14.0	15.0	16.0	17.0
0.0	3477.02	3307.92	3081.46	2863.96	2605.82	2353.07	2146.32	1955.11	1743.59
45.0	2997.21	2731.31	2490.50	2291.52	2011.88	1832.02	1695.19	1525.49	1398.22
90.0	2790.46	2526.95	2305.27	2101.51	1869.07	1707.74	1566.12	1428.69	1313.97
135.0	2946.42	2684.70	2452.86	2216.24	2001.12	1829.63	1659.94	1528.48	1397.62
180.0	2924.31	2673.34	2427.76	2224.00	2036.38	1825.45	1676.07	1543.42	1397.02
225.0	3485.98	3265.50	3058.75	2846.03	2569.97	2359.04	2168.43	1974.83	1796.77
270.0	3567.25	3404.72	3226.66	3001.99	2792.25	2552.05	2325.58	2142.74	1949.74
315.0	3483.00	3268.48	3066.52	2853.80	2578.34	2366.21	2172.62	1977.22	1799.76
360.0	3477.02	3307.92	3081.46	2863.96	2605.82	2353.07	2146.32	1955.11	1743.59

C/γ(°)	18.0	19.0	20.0	21.0	22.0	23.0	24.0	25.0	26.0
0.0	1599.59	1476.49	1348.62	1259.59	1180.72	1117.98	1034.32	979.95	936.93
45.0	1310.98	1204.02	1129.33	1068.98	998.47	950.07	906.45	858.65	823.39
90.0	1188.49	1132.50	1060.26	1004.98	950.07	907.11	864.03	825.07	793.76
135.0	1283.49	1196.85	1122.16	1041.49	985.33	939.32	884.94	847.30	815.03
180.0	1294.25	1190.40	1115.17	1042.33	986.82	932.09	884.76	847.30	810.37
225.0	1657.55	1519.52	1410.77	1289.47	1188.78	1123.29	1057.81	986.34	937.16
270.0	1780.64	1645.00	1523.10	1385.07	1287.08	1200.44	1115.59	1042.09	984.13
315.0	1658.74	1533.26	1398.22	1299.63	1184.24	1117.14	1042.81	984.91	928.14
360.0	1599.59	1476.49	1348.62	1259.59	1180.72	1117.98	1034.32	979.95	936.93

C/γ(°)	27.0	28.0	29.0	30.0	31.0	32.0	33.0	34.0	35.0
0.0	883.15	841.32	804.27	776.19	748.70	726.60	703.89	686.56	671.03
45.0	792.92	759.46	734.96	714.64	689.55	669.23	654.29	636.37	617.84
90.0	762.87	735.44	713.15	692.54	667.08	652.80	637.38	615.45	593.94
135.0	782.17	753.48	729.58	706.88	686.56	664.45	649.51	633.38	613.66
180.0	780.79	750.56	722.71	700.42	680.88	659.43	644.67	631.47	612.35
225.0	893.78	846.58	813.42	784.32	753.90	725.82	703.53	681.36	662.00
270.0	927.37	878.37	840.72	803.68	775.00	746.31	720.62	699.71	680.59
315.0	884.64	842.04	804.93	775.59	746.01	720.08	699.29	679.81	659.67
360.0	883.15	841.32	804.27	776.19	748.70	726.60	703.89	686.56	671.03

C/γ(°)	36.0	37.0	38.0	39.0	40.0	41.0	42.0	43.0	44.0
0.0	654.89	640.55	625.02	599.92	571.84	544.95	500.13	464.28	431.42
45.0	597.53	565.86	535.39	497.74	457.11	421.86	378.24	337.60	304.74
90.0	564.31	527.32	493.32	456.15	412.59	374.35	337.96	291.89	260.82
135.0	590.36	561.08	527.02	483.40	446.95	409.90	366.29	324.46	305.93
180.0	594.12	566.64	533.53	496.25	457.65	416.18	375.37	332.17	289.08
225.0	647.36	632.07	615.99	592.81	559.77	527.92	488.48	446.53	409.79
270.0	660.27	645.93	631.59	608.88	582.59	551.52	516.27	473.84	436.79
315.0	646.35	632.90	614.98	591.61	562.51	527.74	488.84	452.27	411.58
360.0	654.89	640.55	625.02	599.92	571.84	544.95	500.13	464.28	431.42

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	380.63	339.40	304.14	256.52	210.75	174.06	134.44	102.30	74.69
45.0	260.04	213.08	180.75	147.29	112.10	79.17	55.03	39.97	33.34
90.0	225.21	182.01	150.10	122.73	87.90	62.56	45.41	37.52	35.49
135.0	241.22	200.59	164.44	127.69	93.51	65.85	40.75	28.98	22.65
180.0	250.60	209.14	169.76	133.61	103.43	66.56	44.87	29.64	20.79
225.0	369.39	322.31	280.66	243.43	196.35	160.74	126.50	88.43	64.29
270.0	395.56	351.35	314.30	304.14	230.11	187.09	151.77	115.44	82.16
315.0	372.86	331.09	287.65	250.72	214.75	171.43	137.61	108.09	76.54
360.0	380.63	339.40	304.14	256.52	210.75	174.06	134.44	102.30	74.69

C/γ(°)	54.0	55.0	56.0	57.0	58.0	59.0	60.0	61.0	62.0
0.0	51.27	41.77	37.05	35.25	33.52	31.25	27.49	22.29	13.44
45.0	31.85	29.76	27.67	23.90	19.12	13.80	8.72	8.13	7.95
90.0	34.78	33.70	31.97	29.58	25.93	13.50	8.13	8.01	7.95
135.0	22.35	22.53	22.71	21.93	20.79	18.46	8.31	7.95	7.89
180.0	19.48	18.76	17.69	16.79	15.77	14.28	8.96	7.95	7.83
225.0	40.09	27.31	22.89	21.39	19.96	18.94	17.99	16.37	13.74
270.0	58.14	33.22	24.62	20.85	19.36	18.05	16.97	15.60	13.44
315.0	52.40	41.41	35.61	35.19	34.30	32.57	30.53	27.37	17.69
360.0	51.27	41.77	37.05	35.25	33.52	31.25	27.49	22.29	13.44

C/γ(°)	63.0	64.0	65.0	66.0	67.0	68.0	69.0	70.0	71.0
0.0	8.19	8.07	7.95	7.83	7.77	7.71	7.71	7.65	7.65
45.0	7.95	7.83	7.77	7.77	7.71	7.65	7.65	7.59	7.59
90.0	7.89	7.83	7.77	7.77	7.71	7.71	7.65	7.65	7.65
135.0	7.83	7.77	7.77	7.71	7.65	7.65	7.65	7.59	7.65
180.0	7.77	7.71	7.65	7.65	7.65	7.59	7.53	7.53	7.53
225.0	8.19	8.07	8.01	7.89	7.83	7.71	7.71	7.65	7.59
270.0	9.86	8.25	8.07	8.01	7.89	7.83	7.83	7.77	7.71
315.0	8.19	8.07	7.95	7.89	7.83	7.71	7.65	7.65	7.65
360.0	8.19	8.07	7.95	7.83	7.77	7.71	7.71	7.65	7.65

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

C/γ(°)	81.0	82.0	83.0	84.0	85.0	86.0	87.0	88.0	89.0
0.0	7.41	7.41	7.41	7.41	7.41	7.41	7.35	7.35	7.35
45.0	7.41	7.41	7.41	7.41	7.29	7.35	7.35	7.35	7.35
90.0	7.53	7.53	7.53	7.41	7.35	7.41	7.35	7.35	7.35
135.0	7.53	7.53	7.47	7.41	7.41	7.35	7.35	7.35	7.35
180.0	7.47	7.47	7.41	7.47	7.41	7.29	7.29	7.29	7.29
225.0	7.41	7.41	7.41	7.41	7.41	7.41	7.35	7.35	7.29
270.0	7.53	7.53	7.53	7.47	7.47	7.41	7.41	7.35	7.41
315.0	7.41	7.41	7.41	7.41	7.41	7.41	7.35	7.35	7.35
360.0	7.41	7.41	7.41	7.41	7.41	7.41	7.35	7.35	7.35

Intensity data(cd)

C/γ(°)	90.0
0.0	7.29
45.0	7.35
90.0	7.35
135.0	7.35
180.0	7.35
225.0	7.29
270.0	7.41
315.0	7.35
360.0	7.29