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: 2-2646-L
Luminaire: 92.70.429.00
Report No: 20231010-B004
Ballast type: AC

Test No: 20231010-C004	Voltage(V): 36.040
LampCAT: CREE CXA1830 LES14	Current(A): 0.530
Lamp flux(lm): 1997.0	Power (W): 19.101
Number of Lamps: 1	PF: 0.000
Length(mm): 0	Width(mm): 0
Phm Type: C	Height(mm): 0

Photometric Results

Lumens(lm): 1852.55, Efficiency(%): 92.77% , Luminous Efficacy(lm/W): 96.99
Central intensity(cd): 3282.690, Maximum intensity(cd): 3282.690
Angle of maximum intensity: C=0.0 γ=0.0
Beam Angle(50%Imax): [C0/180]Total=46.4
[C90/270]Total=46.4
Field angle(10%Imax): [C0/180]Total=66.6
[C90/270]Total=66.6
Maximum s/h(1/2): C0_180=0.73 C90_270=0.73
Maximum s/h(1/4): C0_180=0.72 C90_270=0.72
Up flux rate of lamp(%): 0.00%
Down flux rate of lamp(%): 92.77%
Up flux rate of LUM(%): - -
Down flux rate of LUM(%): 100.00%
CIE Type : Direct lighting
Output flux ratio in π solid angle : 98.077%

Zonal flux distribution table

γ(°)	Average I(cd)	Zonal F(lm)	Sum F(lm)	Eff Flux(%)	Eff Sum(%)
0.0	3282.690	0.000	0	0.00%	0.00%
1.0	3274.110	3.137	3.137	0.16%	0.17%
2.0	3245.949	9.358	12.496	0.47%	0.67%
3.0	3207.271	15.434	27.929	0.77%	1.51%
4.0	3160.981	21.317	49.246	1.07%	2.66%
5.0	3113.446	26.992	76.238	1.35%	4.12%
6.0	3063.490	32.461	108.7	1.63%	5.87%
7.0	3011.734	37.709	146.409	1.89%	7.90%
8.0	2959.286	42.733	189.142	2.14%	10.21%
9.0	2901.857	47.501	236.643	2.38%	12.77%
10.0	2845.466	52.011	288.655	2.60%	15.58%
11.0	2780.564	56.216	344.87	2.81%	18.62%
12.0	2716.976	60.096	404.966	3.01%	21.86%
13.0	2646.262	63.648	468.614	3.19%	25.30%
14.0	2572.434	66.799	535.413	3.34%	28.90%
15.0	2495.562	69.576	604.989	3.48%	32.66%
16.0	2405.889	71.820	676.809	3.60%	36.53%
17.0	2313.172	73.488	750.297	3.68%	40.50%
18.0	2207.377	74.534	824.831	3.73%	44.52%
19.0	2107.187	75.065	899.896	3.76%	48.58%
20.0	1989.976	74.989	974.885	3.76%	52.62%
21.0	1884.458	74.397	1049.282	3.73%	56.64%
22.0	1769.945	73.437	1122.719	3.68%	60.60%
23.0	1659.584	71.961	1194.68	3.60%	64.49%
24.0	1547.770	70.124	1264.804	3.51%	68.27%
25.0	1377.004	66.503	1331.307	3.33%	71.86%
26.0	1235.984	61.680	1392.987	3.09%	75.19%
27.0	1153.984	58.471	1451.458	2.93%	78.35%
28.0	1034.981	55.420	1506.878	2.78%	81.34%
29.0	885.187	50.237	1557.115	2.52%	84.05%
30.0	732.875	43.687	1600.802	2.19%	86.41%
31.0	600.248	37.099	1637.901	1.86%	88.41%
32.0	471.883	30.715	1668.616	1.54%	90.07%
33.0	356.602	24.407	1693.024	1.22%	91.39%
34.0	274.879	19.110	1712.134	0.96%	92.42%
35.0	226.043	15.557	1727.691	0.78%	93.26%
36.0	168.559	12.564	1740.255	0.63%	93.94%
37.0	108.251	9.028	1749.283	0.45%	94.43%

Zonal flux distribution table

γ(°)	Average I(cd)	Zonal F(lm)	Sum F(lm)	Eff Flux(%)	Eff Sum(%)
38.0	90.794	6.644	1755.927	0.33%	94.78%
39.0	77.025	5.728	1761.655	0.29%	95.09%
40.0	66.750	5.014	1766.67	0.25%	95.36%
41.0	58.862	4.473	1771.143	0.22%	95.61%
42.0	51.804	4.021	1775.163	0.20%	95.82%
43.0	46.642	3.647	1778.81	0.18%	96.02%
44.0	42.103	3.350	1782.159	0.17%	96.20%
45.0	38.464	3.096	1785.256	0.16%	96.37%
46.0	35.364	2.887	1788.143	0.14%	96.52%
47.0	32.728	2.708	1790.851	0.14%	96.67%
48.0	30.569	2.559	1793.41	0.13%	96.81%
49.0	28.611	2.430	1795.84	0.12%	96.94%
50.0	26.846	2.312	1798.152	0.12%	97.06%
51.0	25.227	2.203	1800.356	0.11%	97.18%
52.0	23.906	2.108	1802.464	0.11%	97.30%
53.0	22.695	2.027	1804.491	0.10%	97.41%
54.0	21.595	1.952	1806.443	0.10%	97.51%
55.0	20.598	1.883	1808.327	0.09%	97.61%
56.0	19.692	1.821	1810.147	0.09%	97.71%
57.0	18.917	1.765	1811.913	0.09%	97.81%
58.0	18.170	1.715	1813.628	0.09%	97.90%
59.0	17.519	1.668	1815.296	0.08%	97.99%
60.0	16.938	1.628	1816.924	0.08%	98.08%
61.0	16.364	1.589	1818.513	0.08%	98.16%
62.0	15.873	1.553	1820.067	0.08%	98.25%
63.0	15.381	1.520	1821.587	0.08%	98.33%
64.0	14.925	1.487	1823.074	0.07%	98.41%
65.0	14.516	1.457	1824.531	0.07%	98.49%
66.0	14.115	1.429	1825.959	0.07%	98.56%
67.0	13.748	1.401	1827.36	0.07%	98.64%
68.0	13.361	1.373	1828.734	0.07%	98.71%
69.0	13.022	1.346	1830.08	0.07%	98.79%
70.0	12.683	1.320	1831.4	0.07%	98.86%
71.0	12.378	1.295	1832.695	0.06%	98.93%
72.0	12.039	1.270	1833.965	0.06%	99.00%
73.0	11.735	1.243	1835.208	0.06%	99.06%
74.0	11.465	1.220	1836.428	0.06%	99.13%
75.0	11.140	1.194	1837.622	0.06%	99.19%

Zonal flux distribution table

γ(°)	Average I(cd)	Zonal F(lm)	Sum F(lm)	Eff Flux(%)	Eff Sum(%)
76.0	10.849	1.167	1838.789	0.06%	99.26%
77.0	10.545	1.141	1839.93	0.06%	99.32%
78.0	10.268	1.114	1841.044	0.06%	99.38%
79.0	9.971	1.087	1842.131	0.05%	99.44%
80.0	9.687	1.060	1843.191	0.05%	99.49%
81.0	9.452	1.035	1844.226	0.05%	99.55%
82.0	9.175	1.010	1845.236	0.05%	99.61%
83.0	8.933	0.984	1846.221	0.05%	99.66%
84.0	8.697	0.960	1847.181	0.05%	99.71%
85.0	8.511	0.939	1848.12	0.05%	99.76%
86.0	8.310	0.919	1849.04	0.05%	99.81%
87.0	8.165	0.902	1849.941	0.05%	99.86%
88.0	7.992	0.885	1850.826	0.04%	99.91%
89.0	7.839	0.868	1851.694	0.04%	99.95%
90.0	7.805	0.858	1852.552	0.04%	100.00%

Zonal flux distribution table

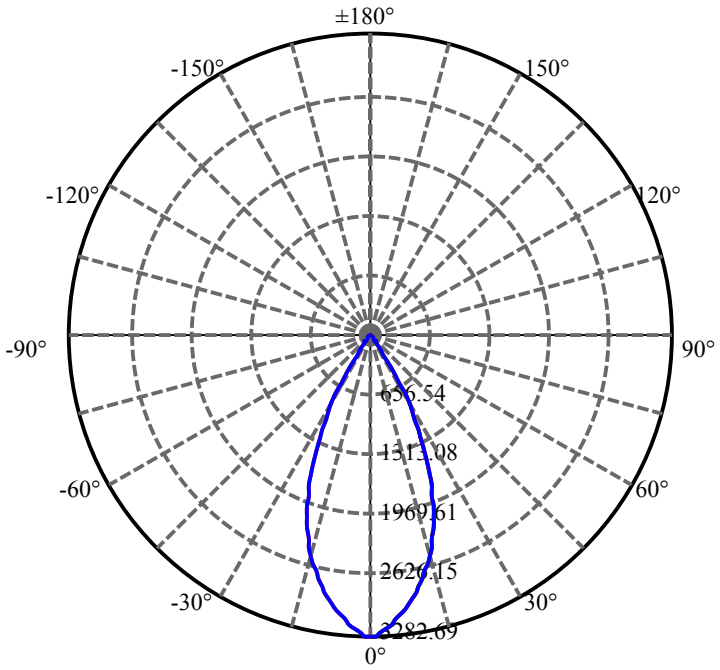
ZONAL LUMEN SUMMARY

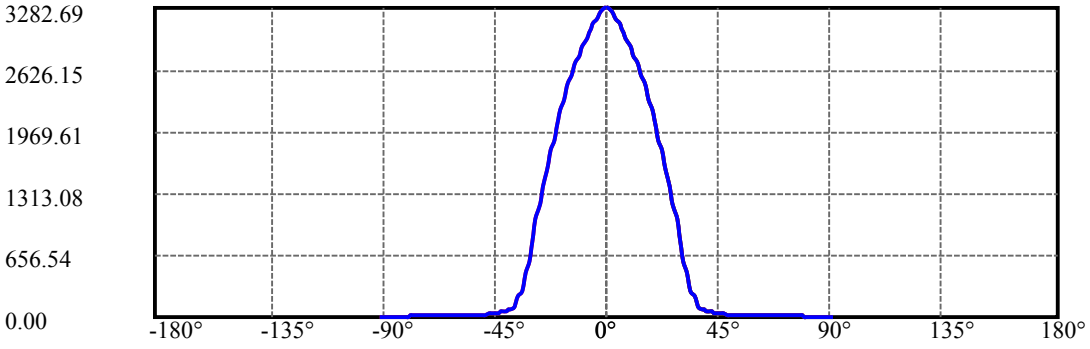
Zone	Lumens	%Lamp	%Fixt
0-30	1600.80	80.16%	86.41%
0-40	1766.67	88.46%	95.36%
0-60	1816.92	90.98%	98.08%
0-90	1851.69	92.72%	99.95%
0-120	1851.69	92.72%	99.95%
0-180	1852.55	92.77%	100.00%
60-90	34.77	1.74%	1.88%
90-120	0.00	0.00%	0.00%
90-130	0.00	0.00%	0.00%
90-150	0.00	0.00%	0.00%
90-180	0.00	0.00%	0.00%
0-27.55	1482.04	74.21%	80.00%

ZONAL LUMEN SUMMARY

0-10	288.65
10-20	686.23
20-30	625.92
30-40	165.87
40-50	31.48
50-60	18.77
60-70	14.48
70-80	11.79
80-90	8.50
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:

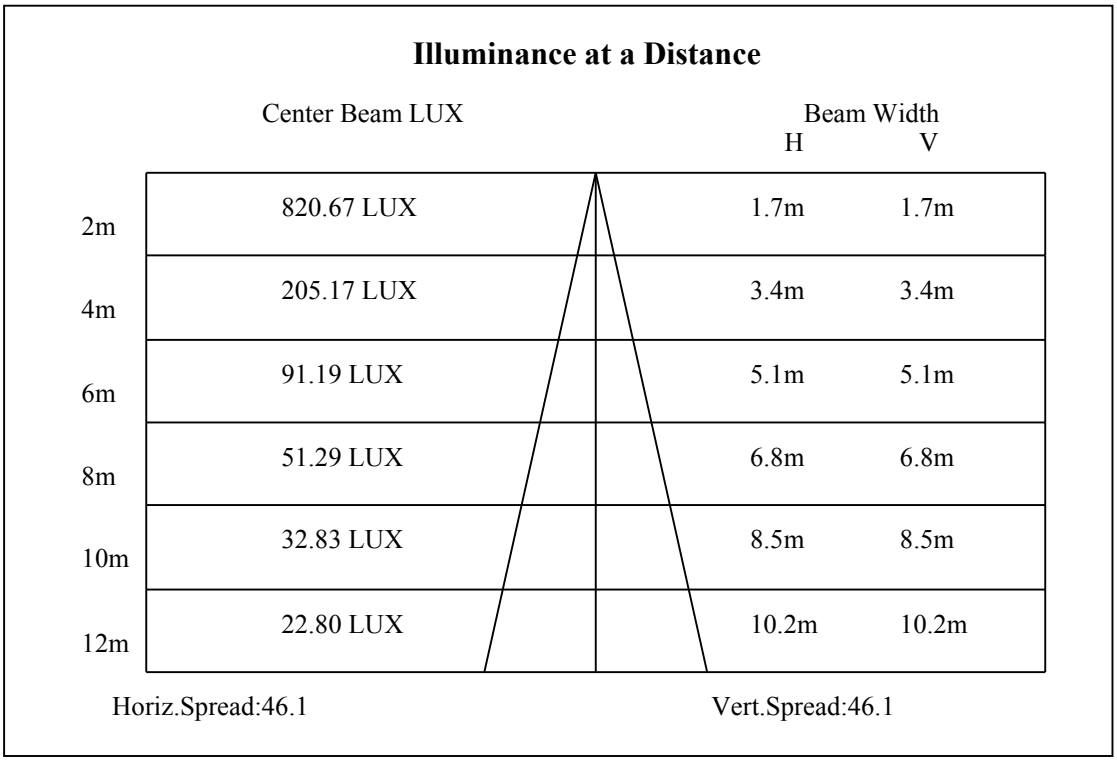
C90/C270:

Field angle(10%Imax):C0/180Left:33.3 Right:33.3
:C90/270Left:33.3 Right:33.3

Beam Angle(50%Imax):C0/180Left:23.2 Right:23.2
:C90/270Left:23.2 Right:23.2

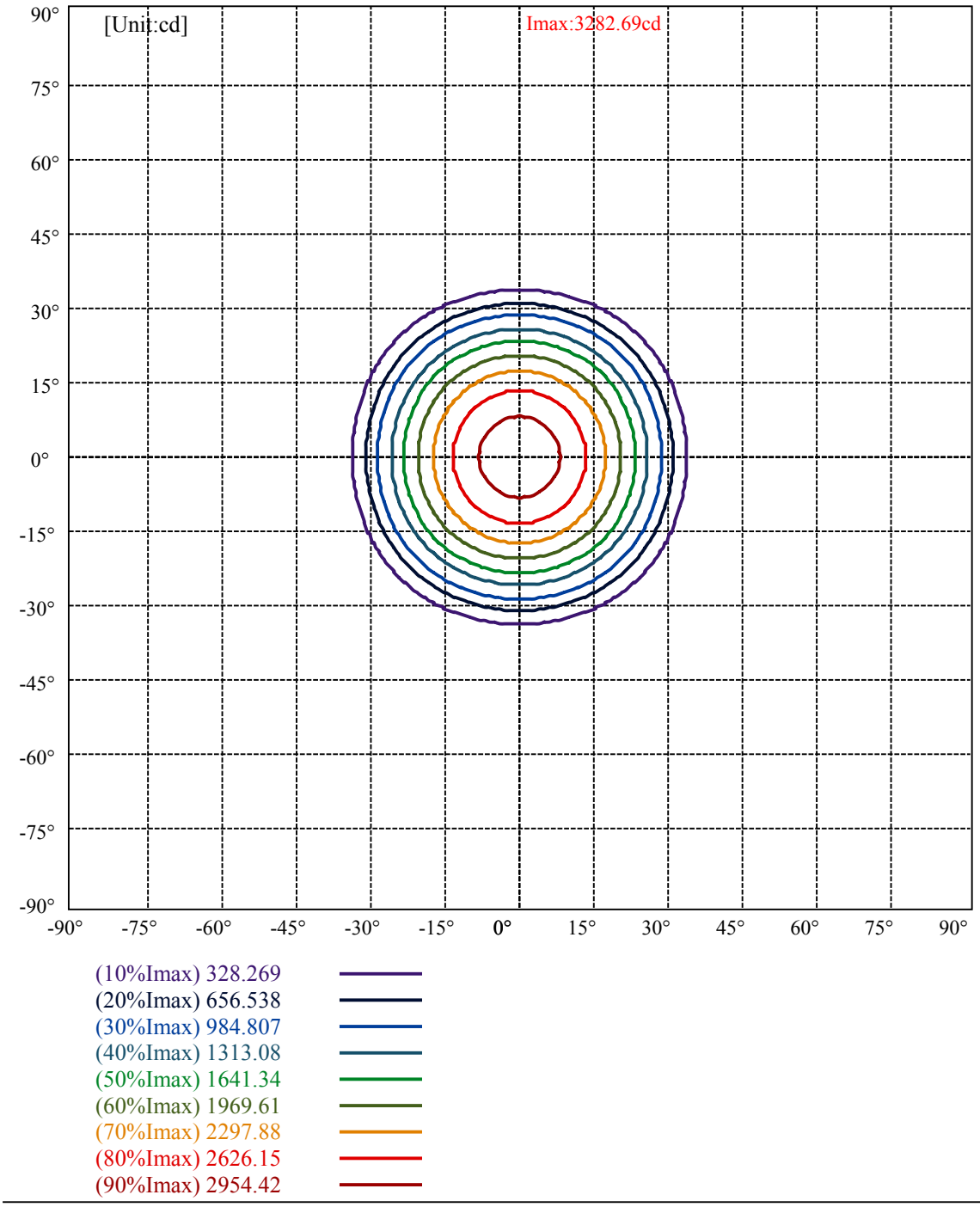
Equipment: GMS1980 Date: 2023/10/10 Operator: NT07
Temperature(°C): 25.0 Humidity(%): 60.0% Distance(m): 7.44

Lux distance Curve



Equipment: GMS1980 Date: 2023/10/10 Operator: NT07
Temperature(°C): 25.0 Humidity(%): 60.0% Distance(m): 7.44

ISO-Intensity(V-H)

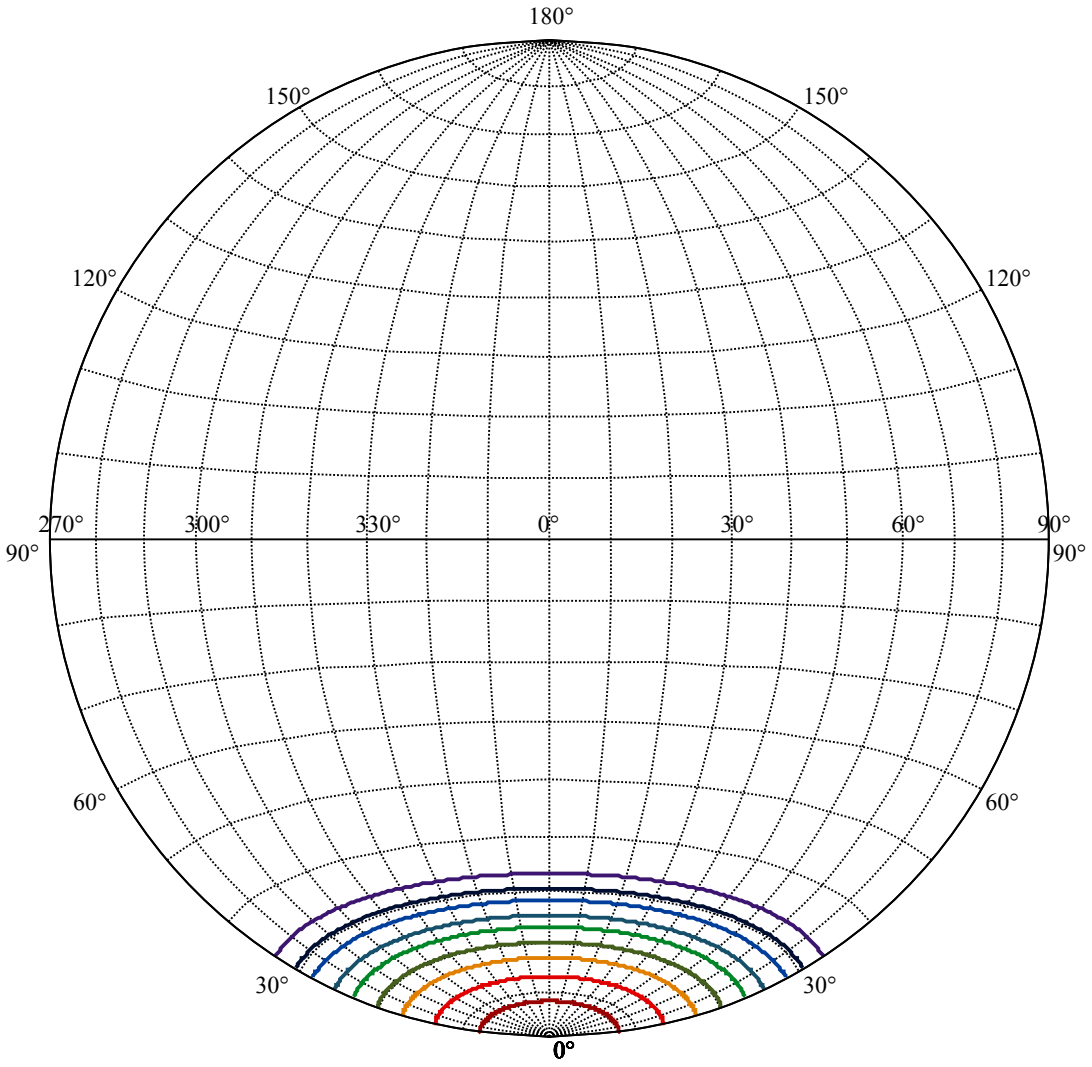


Equipment: GMS1980
Temperature(°C): 25.0

Date: 2023/10/10
Humidity(%): 60.0%

Operator: NT07
Distance(m): 7.44

ISO candela diagram on circular web



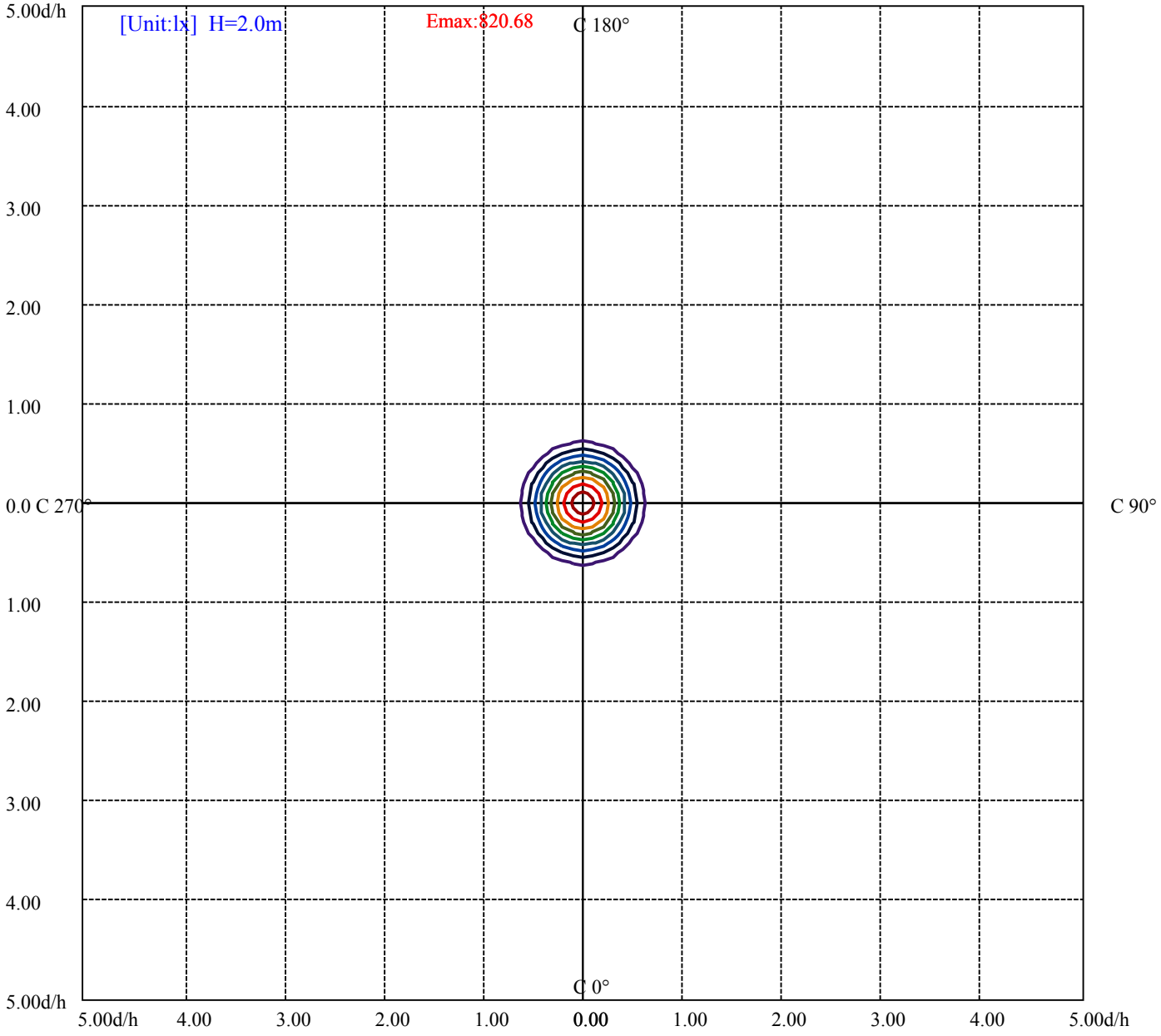
House [Unit:cd] Road

Imax:3282.69

(10%Imax) 328.269
(20%Imax) 656.538
(30%Imax) 984.807
(40%Imax) 1313.08
(50%Imax) 1641.34
(60%Imax) 1969.61
(70%Imax) 2297.88
(80%Imax) 2626.15
(90%Imax) 2954.42

Equipment: GMS1980 Date: 2023/10/10 Operator: NT07
Temperature(°C): 25.0 Humidity(%): 60.0% Distance(m): 7.44

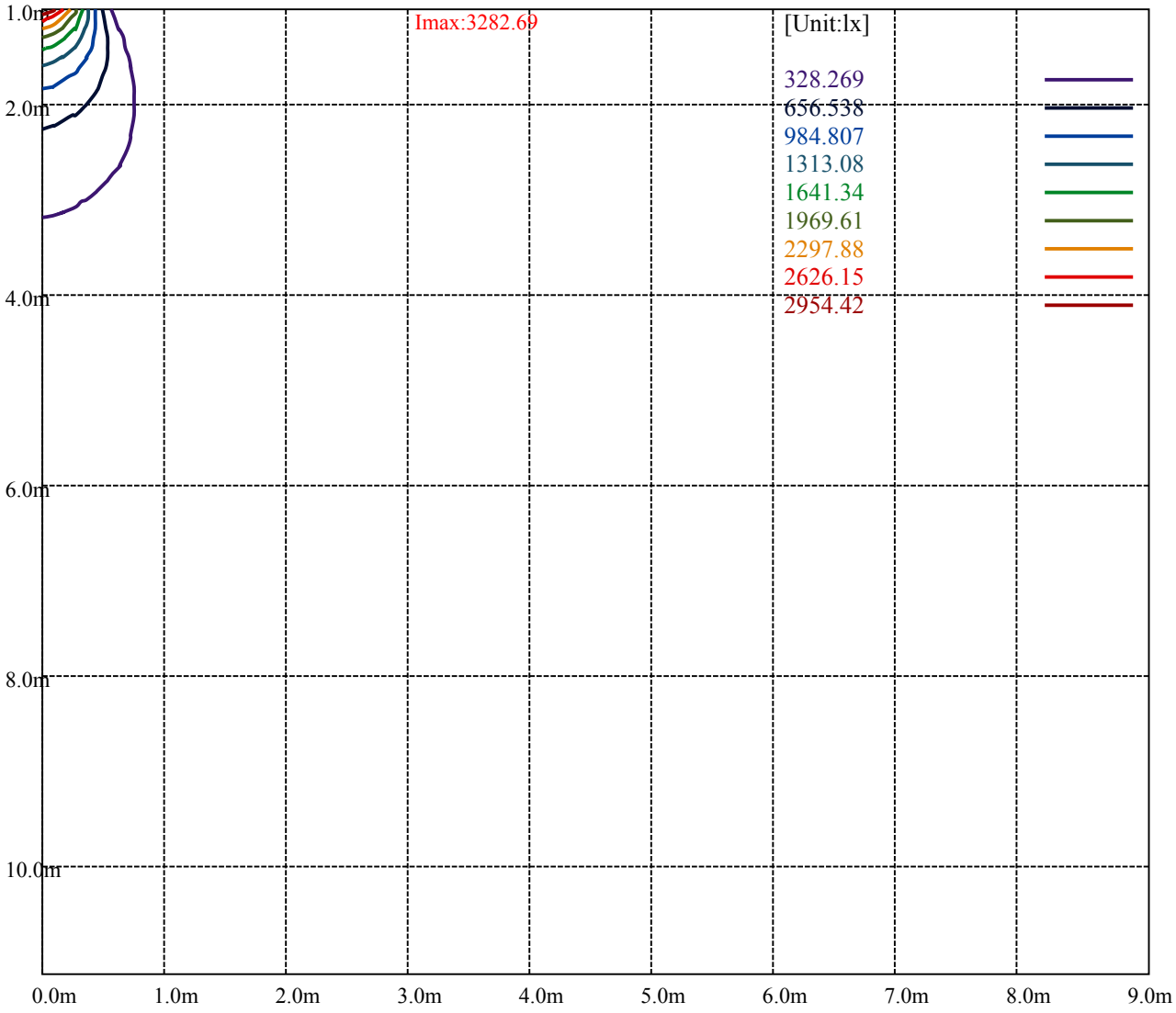
ISO illuminance diagram



(10%Emax) 82.06725
(20%Emax) 164.1345
(30%Emax) 246.2018
(40%Emax) 328.27
(50%Emax) 410.335
(60%Emax) 492.4025
(70%Emax) 574.47
(80%Emax) 656.5375
(90%Emax) 738.605

Equipment: GMS1980
Temperature(°C): 25.0
Date: 2023/10/10
Humidity(%): 60.0%
Operator: NT07
Distance(m): 7.44

Space ISO Lux diagram



Equipment: GMS1980
Temperature(°C): 25.0

Date: 2023/10/10
Humidity(%): 60.0%

Operator: NT07
Distance(m): 7.44

Luminance Limitting Curve(no luminous side)

Luminance Table

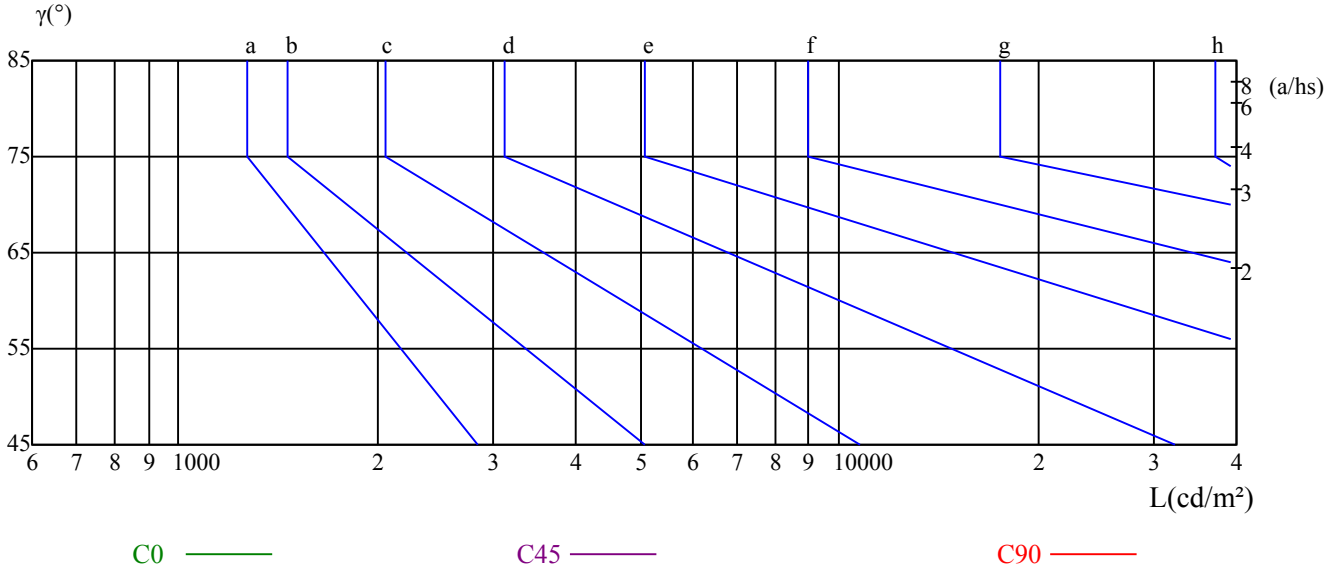
γ	45	50	55	60	65	70	75	80	85
C0	0	0	0	0	0	0	0	0	0
C45	0	0	0	0	0	0	0	0	0
C90	0	0	0	0	0	0	0	0	0

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

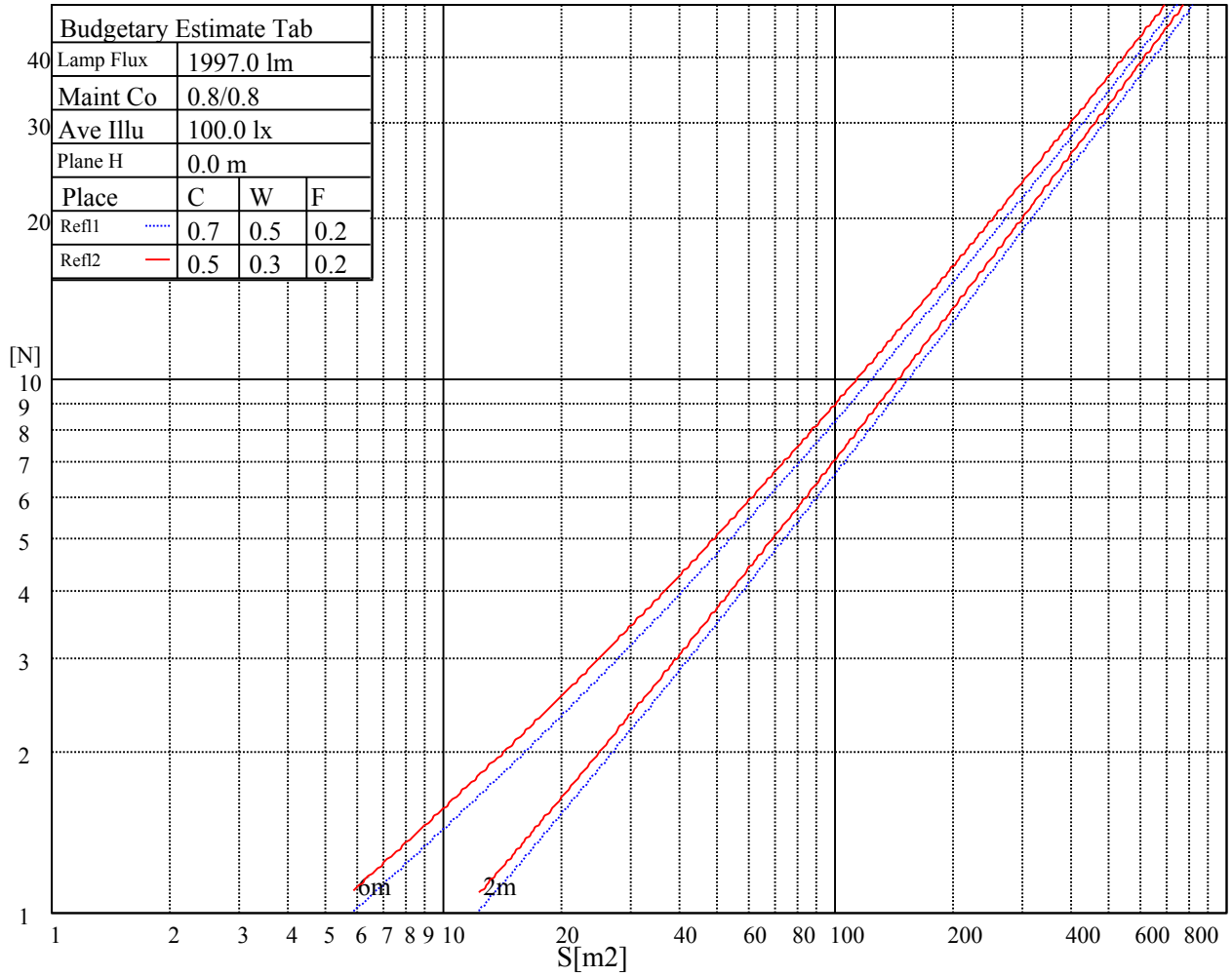
Date: 2023/10/10
Humidity(%): 60.0%

Operator: NT07
Distance(m): 7.44

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

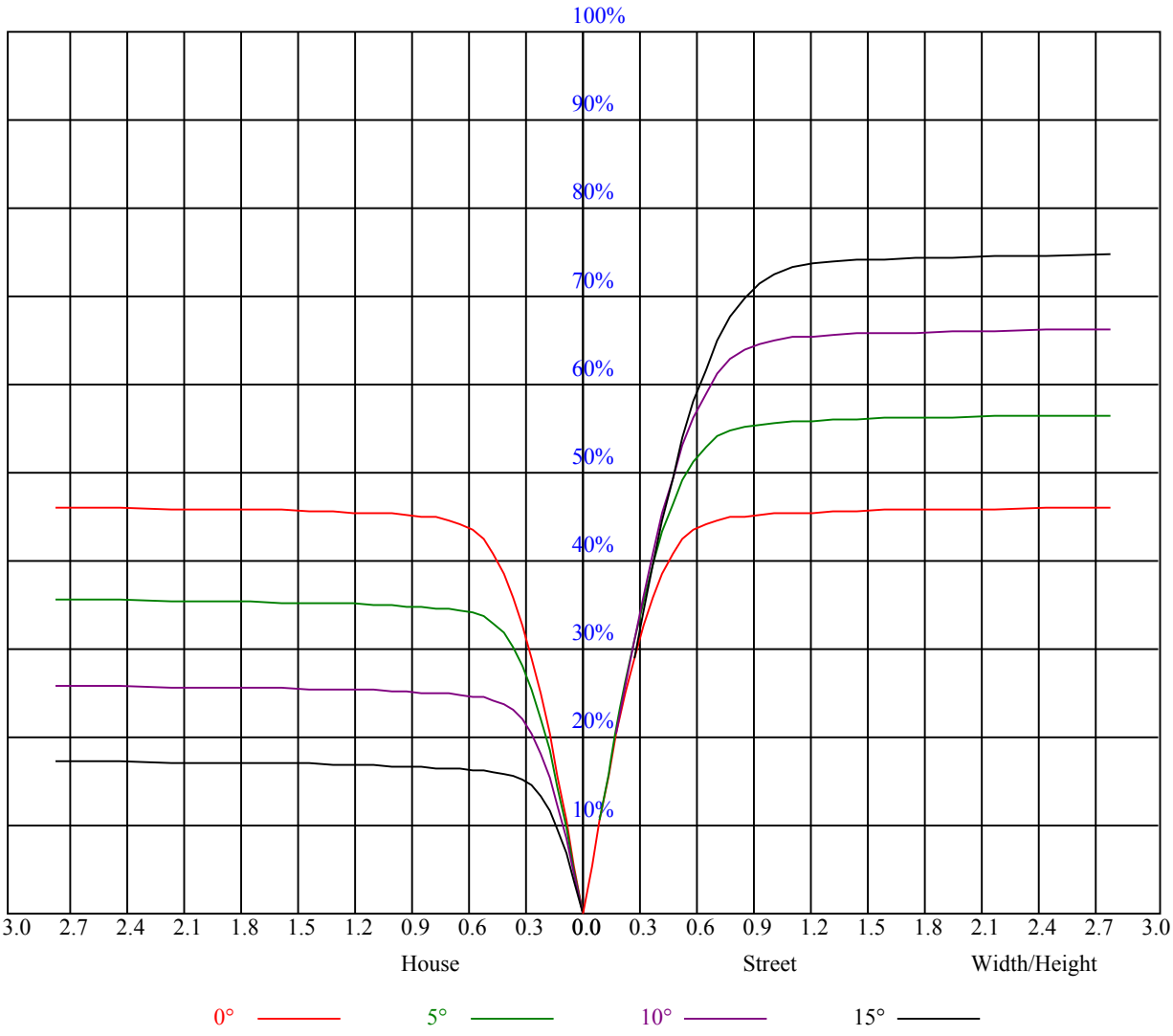


Equipment: GMS1980 Date: 2023/10/10 Operator: NT07
Temperature(°C): 25.0 Humidity(%): 60.0% Distance(m): 7.44

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	1.10	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	1.01	0.99	1.01	0.99	0.97	0.97	0.96	0.94	0.94	0.93	0.92	0.91	0.90	0.89	0.87
2	0.97	0.93	0.90	0.95	0.92	0.89	0.92	0.90	0.87	0.89	0.87	0.85	0.87	0.85	0.84	0.82
3	0.91	0.87	0.83	0.90	0.86	0.83	0.87	0.84	0.81	0.85	0.82	0.80	0.83	0.81	0.79	0.78
4	0.86	0.81	0.78	0.85	0.81	0.77	0.83	0.79	0.76	0.81	0.78	0.76	0.80	0.77	0.75	0.73
5	0.81	0.77	0.73	0.81	0.76	0.73	0.79	0.75	0.72	0.78	0.74	0.71	0.76	0.73	0.71	0.70
6	0.77	0.72	0.69	0.77	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	0.68	0.65	0.72	0.68	0.65	0.71	0.67	0.64	0.70	0.66	0.64	0.63
8	0.70	0.65	0.62	0.70	0.65	0.62	0.69	0.64	0.61	0.68	0.64	0.61	0.67	0.63	0.61	0.60
9	0.67	0.62	0.59	0.67	0.62	0.59	0.66	0.61	0.58	0.65	0.61	0.58	0.64	0.61	0.58	0.57
10	0.64	0.59	0.56	0.64	0.59	0.56	0.63	0.59	0.56	0.62	0.58	0.56	0.62	0.58	0.56	0.54

Coefficient Utilization Curve



Equipment: GMS1980	Date: 2023/10/10	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	3271.34	3238.68	3192.74	3137.94	3085.91	3031.11	2977.97	2932.58	2881.65
45.0	3291.27	3279.09	3245.33	3204.36	3145.69	3099.75	3032.77	2983.50	2936.45
90.0	3276.32	3243.11	3187.20	3145.14	3101.41	3036.09	2995.13	2942.54	2888.30
135.0	3291.82	3285.73	3259.16	3214.88	3169.49	3122.99	3074.84	3011.73	2964.13
180.0	3271.34	3289.61	3287.95	3268.57	3234.81	3189.42	3153.44	3105.84	3058.78
225.0	3291.27	3283.52	3256.40	3219.86	3183.88	3144.03	3085.91	3037.20	2980.74
270.0	3276.32	3292.38	3284.63	3256.95	3212.67	3172.81	3130.19	3082.03	3016.16
315.0	3291.82	3280.75	3254.18	3210.45	3153.99	3111.37	3057.68	2998.45	2948.08
360.0	3271.34	3238.68	3192.74	3137.94	3085.91	3031.11	2977.97	2932.58	2881.65

C/γ(°)	9.0	10.0	11.0	12.0	13.0	14.0	15.0	16.0	17.0
0.0	2819.66	2757.66	2695.66	2635.88	2547.32	2482.55	2403.40	2312.62	2199.14
45.0	2873.90	2819.10	2765.96	2689.58	2631.45	2569.46	2502.48	2405.06	2313.17
90.0	2823.53	2770.95	2711.16	2651.38	2559.50	2488.64	2387.90	2286.05	2190.84
135.0	2913.20	2854.53	2780.91	2723.34	2643.63	2575.55	2498.05	2389.01	2298.78
180.0	2996.24	2947.52	2877.78	2814.12	2754.34	2674.63	2607.10	2532.93	2427.75
225.0	2920.95	2866.15	2781.46	2724.45	2660.24	2568.35	2488.09	2407.83	2327.01
270.0	2970.77	2914.31	2857.30	2787.00	2726.66	2657.47	2583.30	2495.28	2418.34
315.0	2896.60	2833.50	2774.27	2710.06	2646.95	2562.82	2494.18	2418.34	2330.33
360.0	2819.66	2757.66	2695.66	2635.88	2547.32	2482.55	2403.40	2312.62	2199.14

C/γ(°)	18.0	19.0	20.0	21.0	22.0	23.0	24.0	25.0	26.0
0.0	2107.81	2008.17	1883.07	1785.65	1661.11	1560.36	1459.62	1081.89	1081.89
45.0	2216.30	2121.09	1988.25	1880.31	1773.47	1647.82	1544.86	1418.66	1304.63
90.0	2060.21	1955.03	1846.54	1737.49	1607.97	1502.24	1399.28	1103.36	1103.36
135.0	2208.00	2107.81	1974.41	1873.11	1774.03	1673.28	1543.20	1438.58	1328.43
180.0	2344.72	2247.30	2146.00	2050.80	1929.02	1822.19	1712.03	1591.91	1486.19
225.0	2205.79	2110.58	2008.73	1908.54	1781.22	1677.16	1549.29	1441.91	1092.35
270.0	2309.30	2209.66	2109.47	1985.48	1878.09	1767.94	1651.70	1522.72	1409.80
315.0	2206.89	2097.85	1963.34	1854.29	1754.65	1625.68	1522.17	1417.00	1081.22
360.0	2107.81	2008.17	1883.07	1785.65	1661.11	1560.36	1459.62	1081.89	1081.89

C/γ(°)	27.0	28.0	29.0	30.0	31.0	32.0	33.0	34.0	35.0
0.0	1046.85	907.02	734.32	601.36	476.87	364.95	269.46	180.56	136.78
45.0	1174.55	1038.38	865.67	732.27	603.85	485.40	349.78	302.18	302.18
90.0	1003.84	870.71	740.85	585.81	469.45	337.82	247.82	177.80	123.72
135.0	1166.24	1034.50	898.33	730.06	600.53	478.75	342.58	296.09	296.09
180.0	1371.05	1216.62	1078.23	893.91	752.75	613.82	486.50	374.13	299.96
225.0	1092.35	1024.48	884.77	713.51	582.21	459.05	350.22	258.67	174.59
270.0	1295.77	1173.99	996.86	859.59	729.51	566.77	447.20	343.14	297.19
315.0	1081.22	1014.13	882.45	746.50	586.80	468.51	359.24	266.47	177.85
360.0	1046.85	907.02	734.32	601.36	476.87	364.95	269.46	180.56	136.78

C/γ(°)	36.0	37.0	38.0	39.0	40.0	41.0	42.0	43.0	44.0
0.0	110.93	89.51	77.16	65.37	57.73	51.64	45.39	41.46	38.03
45.0	133.57	102.07	86.41	74.51	63.16	55.91	48.49	43.73	39.85
90.0	101.68	86.41	74.73	63.49	56.18	50.15	45.00	40.08	36.81
135.0	136.06	106.39	90.72	78.77	67.03	59.39	53.19	47.94	42.68
180.0	299.96	140.04	114.86	93.71	81.26	71.24	61.00	54.58	49.04
225.0	135.12	111.32	94.32	78.60	69.14	59.34	53.03	47.83	42.62
270.0	297.19	127.04	100.74	86.46	75.61	66.81	57.84	52.03	47.11
315.0	133.96	103.23	87.40	75.28	63.88	56.41	50.48	45.50	40.68
360.0	110.93	89.51	77.16	65.37	57.73	51.64	45.39	41.46	38.03

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	35.20	32.22	30.22	28.40	26.74	24.96	23.75	22.58	21.31
45.0	35.92	33.32	31.11	29.17	27.40	25.52	24.19	23.03	21.92
90.0	34.10	31.27	29.39	27.68	25.85	24.58	23.14	22.14	21.20
135.0	39.19	36.37	33.32	31.16	29.28	27.18	25.74	24.47	23.03
180.0	43.56	39.91	36.26	33.71	31.55	29.61	27.46	25.91	24.58
225.0	39.19	36.31	33.16	31.05	29.12	27.46	25.52	24.19	23.03
270.0	43.12	38.91	36.15	33.60	31.00	29.06	27.40	25.52	24.19
315.0	37.42	34.60	32.22	29.78	27.95	26.40	24.63	23.41	22.31
360.0	35.20	32.22	30.22	28.40	26.74	24.96	23.75	22.58	21.31

C/γ(°)	54.0	55.0	56.0	57.0	58.0	59.0	60.0	61.0	62.0
0.0	20.37	19.54	18.60	17.93	17.16	16.66	16.11	15.67	15.11
45.0	20.81	19.93	19.15	18.32	17.71	16.99	16.50	15.94	15.55
90.0	20.37	19.37	18.71	18.10	17.55	16.88	16.44	16.00	15.61
135.0	22.03	21.09	20.20	19.26	18.54	17.93	17.33	16.66	16.22
180.0	23.36	21.98	20.98	20.15	19.32	18.49	17.82	17.05	16.55
225.0	21.98	20.98	19.98	19.21	18.32	17.71	17.10	16.50	16.00
270.0	22.81	21.70	20.76	19.93	18.93	18.27	17.66	17.05	16.38
315.0	21.03	20.20	19.15	18.43	17.82	17.21	16.55	16.05	15.55
360.0	20.37	19.54	18.60	17.93	17.16	16.66	16.11	15.67	15.11

C/γ(°)	63.0	64.0	65.0	66.0	67.0	68.0	69.0	70.0	71.0
0.0	14.72	14.28	13.95	13.56	13.23	12.90	12.57	12.18	11.90
45.0	15.00	14.67	14.28	13.95	13.56	13.23	12.90	12.57	12.29
90.0	15.11	14.72	14.28	13.89	13.56	13.17	12.84	12.57	12.23
135.0	15.67	15.22	14.83	14.34	14.00	13.62	13.28	12.84	12.57
180.0	16.05	15.44	15.00	14.61	14.17	13.73	13.40	13.06	12.79
225.0	15.39	14.95	14.56	14.17	13.78	13.40	13.06	12.73	12.40
270.0	15.94	15.44	15.00	14.50	14.12	13.67	13.28	13.01	12.62
315.0	15.17	14.67	14.23	13.89	13.56	13.17	12.84	12.51	12.23
360.0	14.72	14.28	13.95	13.56	13.23	12.90	12.57	12.18	11.90

C/γ(°)	72.0	73.0	74.0	75.0	76.0	77.0	78.0	79.0	80.0
0.0	11.57	11.29	11.07	10.74	10.46	10.19	9.96	9.63	9.47
45.0	12.01	11.62	11.35	11.02	10.74	10.52	10.24	9.96	9.74
90.0	11.85	11.57	11.35	11.07	10.68	10.41	10.13	9.80	9.52
135.0	12.23	11.96	11.57	11.29	11.02	10.63	10.35	10.07	9.74
180.0	12.40	12.12	11.85	11.40	11.13	10.85	10.46	10.19	9.85
225.0	12.07	11.73	11.51	11.13	10.85	10.46	10.19	9.91	9.58
270.0	12.29	12.01	11.73	11.40	11.13	10.85	10.57	10.24	9.91
315.0	11.90	11.57	11.29	11.07	10.79	10.46	10.24	9.96	9.69
360.0	11.57	11.29	11.07	10.74	10.46	10.19	9.96	9.63	9.47

C/γ(°)	81.0	82.0	83.0	84.0	85.0	86.0	87.0	88.0	89.0
0.0	9.24	8.97	8.75	8.52	8.36	8.19	8.03	7.86	7.75
45.0	9.47	9.19	8.91	8.69	8.52	8.30	8.19	8.03	7.80
90.0	9.30	9.02	8.80	8.58	8.41	8.25	8.03	7.86	7.75
135.0	9.47	9.19	8.97	8.75	8.52	8.36	8.19	8.03	7.86
180.0	9.63	9.35	9.08	8.86	8.64	8.41	8.30	8.08	7.97
225.0	9.35	9.08	8.91	8.64	8.47	8.25	8.14	7.97	7.75
270.0	9.69	9.41	9.13	8.86	8.64	8.41	8.25	8.08	7.97
315.0	9.47	9.19	8.91	8.69	8.52	8.30	8.19	8.03	7.86
360.0	9.24	8.97	8.75	8.52	8.36	8.19	8.03	7.86	7.75

Intensity data(cd)

C/γ(°)	90.0
0.0	7.75
45.0	7.69
90.0	7.86
135.0	7.97
180.0	7.86
225.0	7.86
270.0	7.75
315.0	7.69
360.0	7.75