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Address:380JinOu Road,GaoXin Zone,Jiang Men City,Guangdong,China

NATA

Client:
LumCAT: 1-1373-L
Luminaire: 92.70.427.00
Report No: 2023718-B014
Ballast type: AC

Test No: 2023718-C014	Voltage(V): 35.630
LampCAT: CITIZEN CLU028	Current(A): 0.282
Lamp flux(lm): 1223.2	Power (W): 10.047
Number of Lamps: 1	PF: 0.000
Length(mm): 0	Width(mm): 0
Phm Type: C	Height(mm): 0

Photometric Results

Lumens(lm): 1087.66, Efficiency(%): 88.92% , Luminous Efficacy(lm/W): 108.26
Central intensity(cd): 3051.727, Maximum intensity(cd): 3051.727
Angle of maximum intensity: C=0.0 γ=0.0
Beam Angle(50%Imax): [C0/180]Total=28.8
[C90/270]Total=28.8
Field angle(10%Imax): [C0/180]Total=59.8
[C90/270]Total=59.8
Maximum s/h(1/2): C0_180=0.48 C90_270=0.48
Maximum s/h(1/4): C0_180=0.53 C90_270=0.53
Up flux rate of lamp(%): 0.00%
Down flux rate of lamp(%): 88.92%
Up flux rate of LUM(%): - -
Down flux rate of LUM(%): 100.00%
CIE Type : Direct lighting
Output flux ratio in π solid angle : 97.770%

Zonal flux distribution table

γ(°)	Average I(cd)	Zonal F(lm)	Sum F(lm)	Eff Flux(%)	Eff Sum(%)
0.0	3051.727	0.000	0	0.00%	0.00%
1.0	3046.053	2.918	2.918	0.24%	0.27%
2.0	3021.698	8.709	11.627	0.71%	1.07%
3.0	2982.604	14.360	25.987	1.17%	2.39%
4.0	2921.023	19.761	45.748	1.62%	4.21%
5.0	2843.528	24.799	70.547	2.03%	6.49%
6.0	2739.671	29.341	99.888	2.40%	9.18%
7.0	2628.410	33.320	133.208	2.72%	12.25%
8.0	2492.171	36.647	169.855	3.00%	15.62%
9.0	2341.471	39.174	209.029	3.20%	19.22%
10.0	2184.474	40.958	249.987	3.35%	22.98%
11.0	2018.483	41.996	291.983	3.43%	26.85%
12.0	1857.196	42.367	334.35	3.46%	30.74%
13.0	1709.748	42.331	376.681	3.46%	34.63%
14.0	1571.364	41.998	418.679	3.43%	38.49%
15.0	1448.964	41.464	460.143	3.39%	42.31%
16.0	1333.482	40.771	500.914	3.33%	46.05%
17.0	1186.082	39.236	540.15	3.21%	49.66%
18.0	1138.686	38.330	578.48	3.13%	53.19%
19.0	1063.467	38.313	616.793	3.13%	56.71%
20.0	985.038	37.493	654.287	3.07%	60.16%
21.0	907.225	36.335	690.622	2.97%	63.50%
22.0	830.560	34.922	725.543	2.85%	66.71%
23.0	749.799	33.160	758.704	2.71%	69.76%
24.0	680.005	31.261	789.964	2.56%	72.63%
25.0	602.296	29.157	819.121	2.38%	75.31%
26.0	534.155	26.826	845.947	2.19%	77.78%
27.0	472.360	24.625	870.572	2.01%	80.04%
28.0	410.627	22.355	892.927	1.83%	82.10%
29.0	353.979	20.004	912.931	1.64%	83.94%
30.0	298.896	17.627	930.559	1.44%	85.56%
31.0	260.757	15.574	946.133	1.27%	86.99%
32.0	240.442	14.359	960.492	1.17%	88.31%
33.0	177.014	12.298	972.79	1.01%	89.44%
34.0	141.691	9.645	982.435	0.79%	90.33%
35.0	118.443	8.079	990.514	0.66%	91.07%
36.0	102.266	7.027	997.541	0.57%	91.71%
37.0	89.313	6.248	1003.79	0.51%	92.29%

Zonal flux distribution table

γ(°)	Average I(cd)	Zonal F(lm)	Sum F(lm)	Eff Flux(%)	Eff Sum(%)
38.0	80.360	5.663	1009.453	0.46%	92.81%
39.0	71.669	5.189	1014.642	0.42%	93.29%
40.0	63.830	4.726	1019.368	0.39%	93.72%
41.0	56.966	4.301	1023.669	0.35%	94.12%
42.0	50.773	3.914	1027.584	0.32%	94.48%
43.0	45.203	3.555	1031.139	0.29%	94.80%
44.0	40.436	3.232	1034.371	0.26%	95.10%
45.0	36.153	2.943	1037.315	0.24%	95.37%
46.0	32.375	2.680	1039.995	0.22%	95.62%
47.0	28.915	2.438	1042.432	0.20%	95.84%
48.0	26.390	2.236	1044.668	0.18%	96.05%
49.0	24.134	2.075	1046.743	0.17%	96.24%
50.0	22.141	1.929	1048.672	0.16%	96.42%
51.0	20.502	1.804	1050.476	0.15%	96.58%
52.0	19.111	1.700	1052.176	0.14%	96.74%
53.0	17.941	1.612	1053.788	0.13%	96.89%
54.0	16.869	1.534	1055.322	0.13%	97.03%
55.0	15.990	1.467	1056.789	0.12%	97.16%
56.0	15.229	1.411	1058.2	0.12%	97.29%
57.0	14.544	1.361	1059.561	0.11%	97.42%
58.0	13.949	1.318	1060.879	0.11%	97.54%
59.0	13.437	1.280	1062.159	0.10%	97.66%
60.0	12.967	1.247	1063.406	0.10%	97.77%
61.0	12.496	1.215	1064.622	0.10%	97.88%
62.0	12.109	1.186	1065.807	0.10%	97.99%
63.0	11.673	1.157	1066.964	0.09%	98.10%
64.0	11.285	1.127	1068.09	0.09%	98.20%
65.0	10.918	1.099	1069.189	0.09%	98.30%
66.0	10.559	1.072	1070.261	0.09%	98.40%
67.0	10.137	1.041	1071.301	0.09%	98.50%
68.0	9.721	1.006	1072.307	0.08%	98.59%
69.0	9.348	0.973	1073.28	0.08%	98.68%
70.0	8.905	0.937	1074.218	0.08%	98.76%
71.0	8.531	0.901	1075.119	0.07%	98.85%
72.0	8.185	0.869	1075.988	0.07%	98.93%
73.0	7.867	0.839	1076.827	0.07%	99.00%
74.0	7.583	0.812	1077.64	0.07%	99.08%
75.0	7.293	0.786	1078.426	0.06%	99.15%

Zonal flux distribution table

γ(°)	Average I(cd)	Zonal F(lm)	Sum F(lm)	Eff Flux(%)	Eff Sum(%)
76.0	7.037	0.761	1079.186	0.06%	99.22%
77.0	6.774	0.736	1079.923	0.06%	99.29%
78.0	6.546	0.713	1080.636	0.06%	99.35%
79.0	6.290	0.690	1081.325	0.06%	99.42%
80.0	6.061	0.666	1081.991	0.05%	99.48%
81.0	5.854	0.644	1082.636	0.05%	99.54%
82.0	5.660	0.624	1083.26	0.05%	99.60%
83.0	5.480	0.606	1083.865	0.05%	99.65%
84.0	5.328	0.589	1084.454	0.05%	99.71%
85.0	5.169	0.573	1085.027	0.05%	99.76%
86.0	5.016	0.557	1085.584	0.05%	99.81%
87.0	4.871	0.541	1086.125	0.04%	99.86%
88.0	4.719	0.525	1086.65	0.04%	99.91%
89.0	4.581	0.510	1087.16	0.04%	99.95%
90.0	4.518	0.499	1087.659	0.04%	100.00%

Zonal flux distribution table

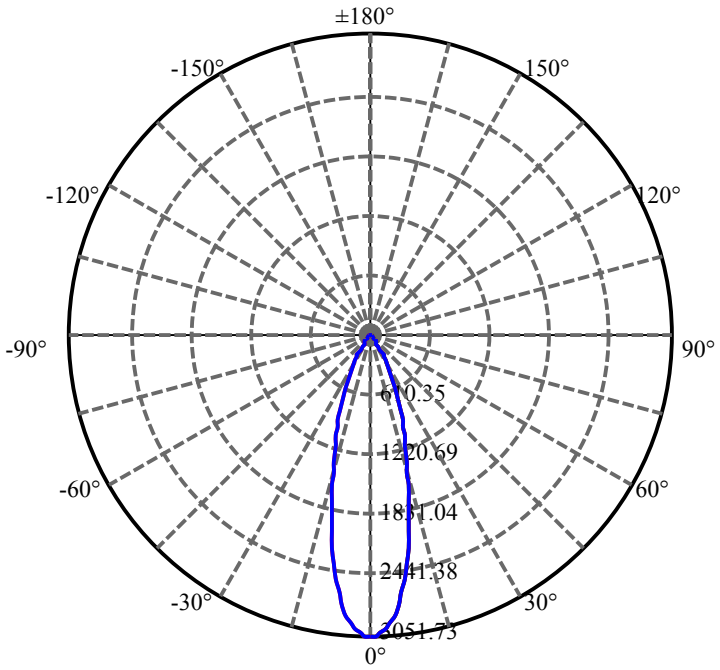
ZONAL LUMEN SUMMARY

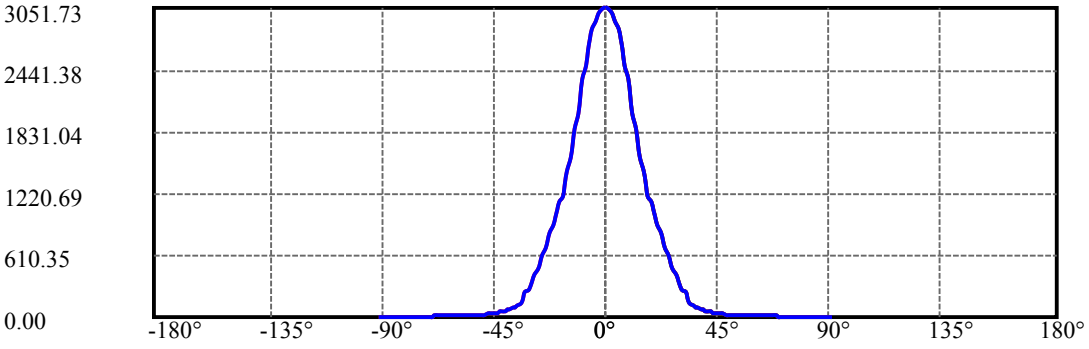
Zone	Lumens	%Lamp	%Fixt
0-30	930.56	76.08%	85.56%
0-40	1019.37	83.34%	93.72%
0-60	1063.41	86.94%	97.77%
0-90	1087.16	88.88%	99.95%
0-120	1087.16	88.88%	99.95%
0-180	1087.66	88.92%	100.00%
60-90	23.75	1.94%	2.18%
90-120	0.00	0.00%	0.00%
90-130	0.00	0.00%	0.00%
90-150	0.00	0.00%	0.00%
90-180	0.00	0.00%	0.00%
0-26.98	870.13	71.14%	80.00%

ZONAL LUMEN SUMMARY

0-10	249.99
10-20	404.30
20-30	276.27
30-40	88.81
40-50	29.30
50-60	14.73
60-70	10.81
70-80	7.77
80-90	5.17
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):

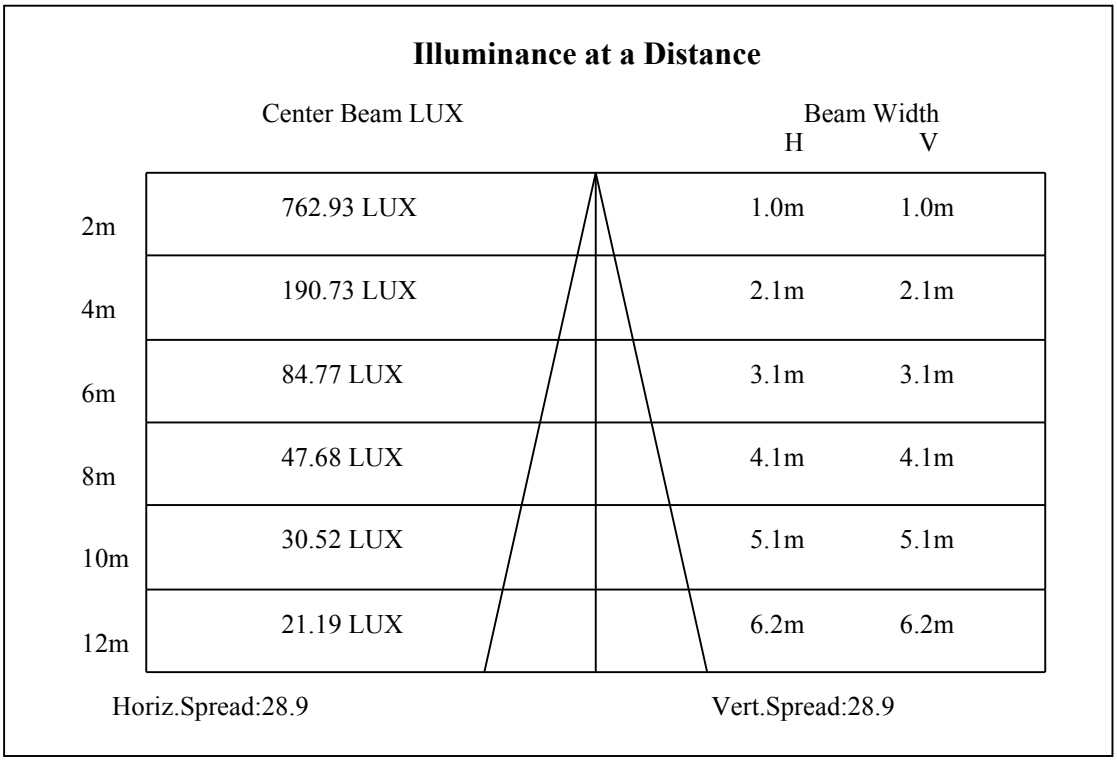
C0/C180:

C90/C270:

Field angle(10%Imax):C0/180Left:29.9 Right:29.9
:C90/270Left:29.9 Right:29.9

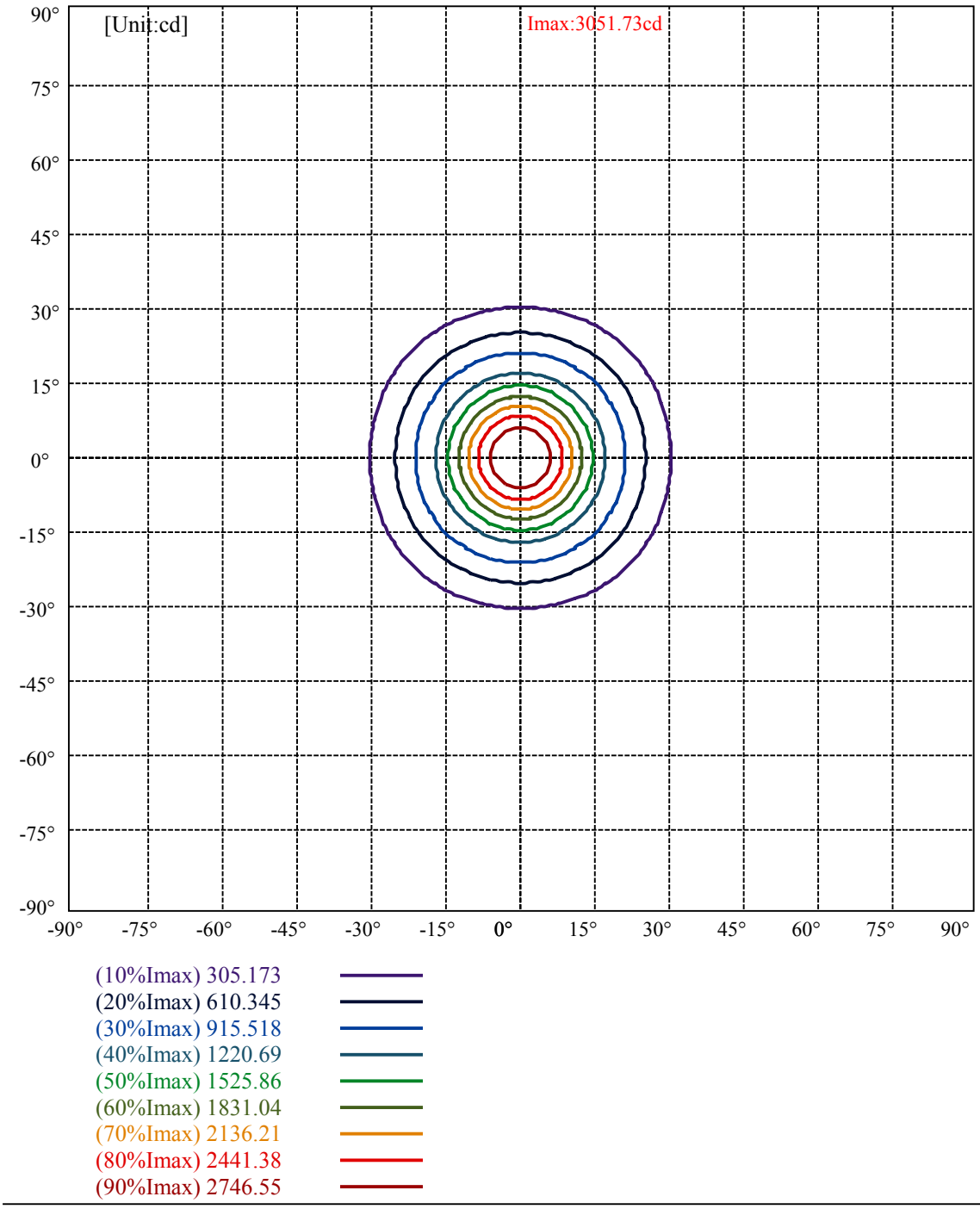
Beam Angle(50%Imax):C0/180Left:14.4 Right:14.4
:C90/270Left:14.4 Right:14.4

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)

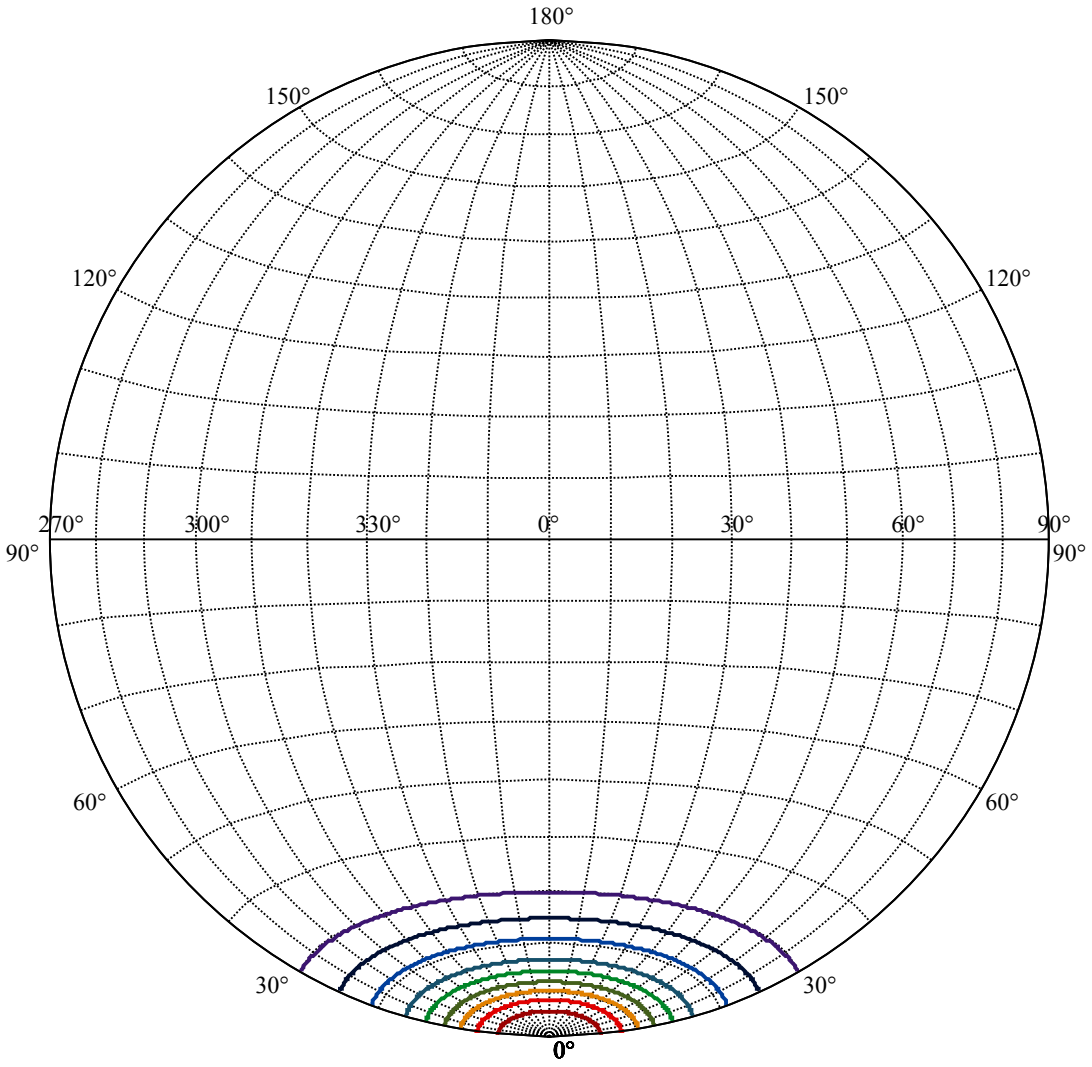


Equipment: GMS1980
Temperature(°C): 25.0

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

Operator: NT07
Distance(m): 7.44

ISO candela diagram on circular web



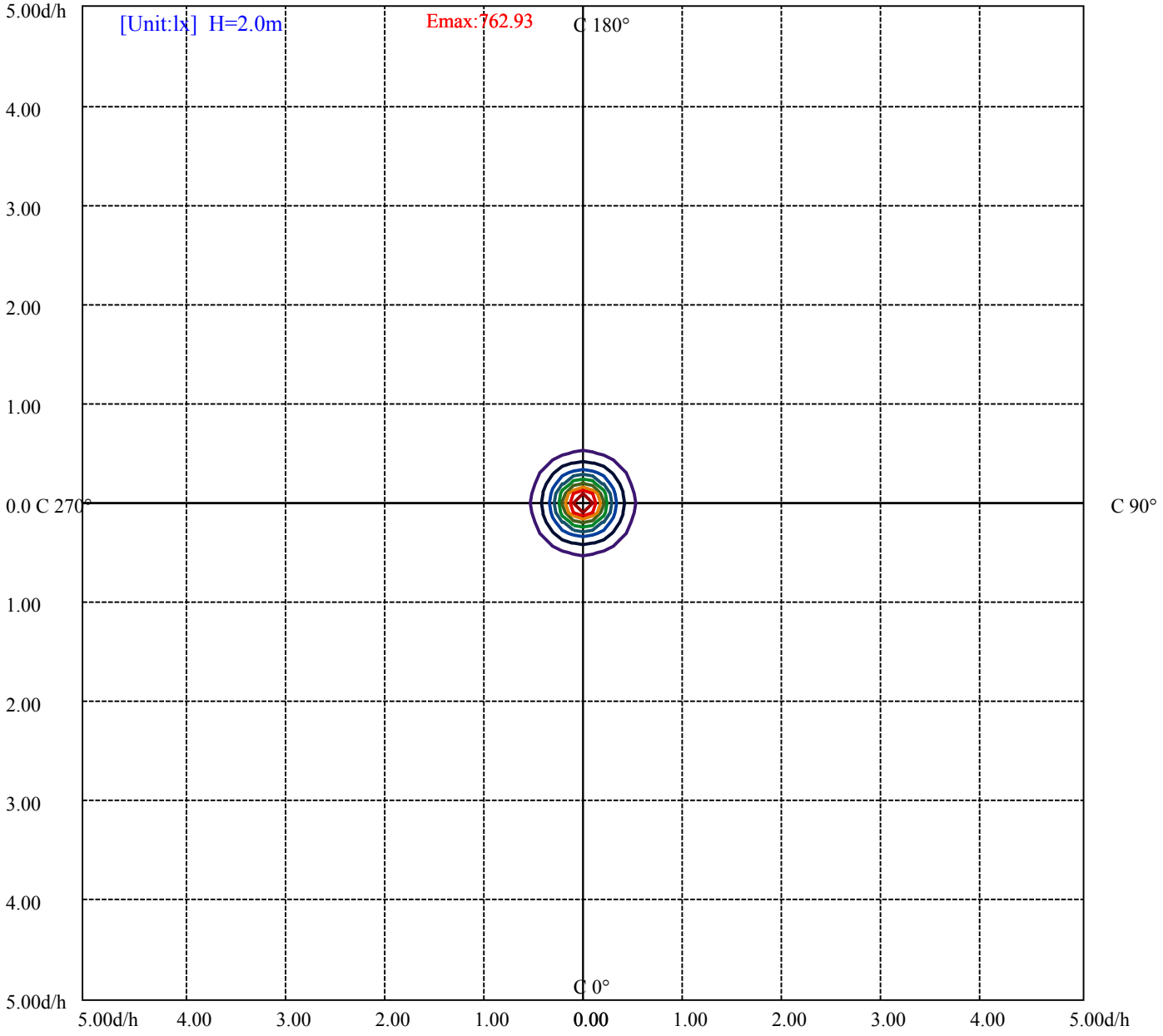
House [Unit:cd] Road

Imax:3051.73

(10%Imax) 305.173
(20%Imax) 610.345
(30%Imax) 915.518
(40%Imax) 1220.69
(50%Imax) 1525.86
(60%Imax) 1831.04
(70%Imax) 2136.21
(80%Imax) 2441.38
(90%Imax) 2746.55

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

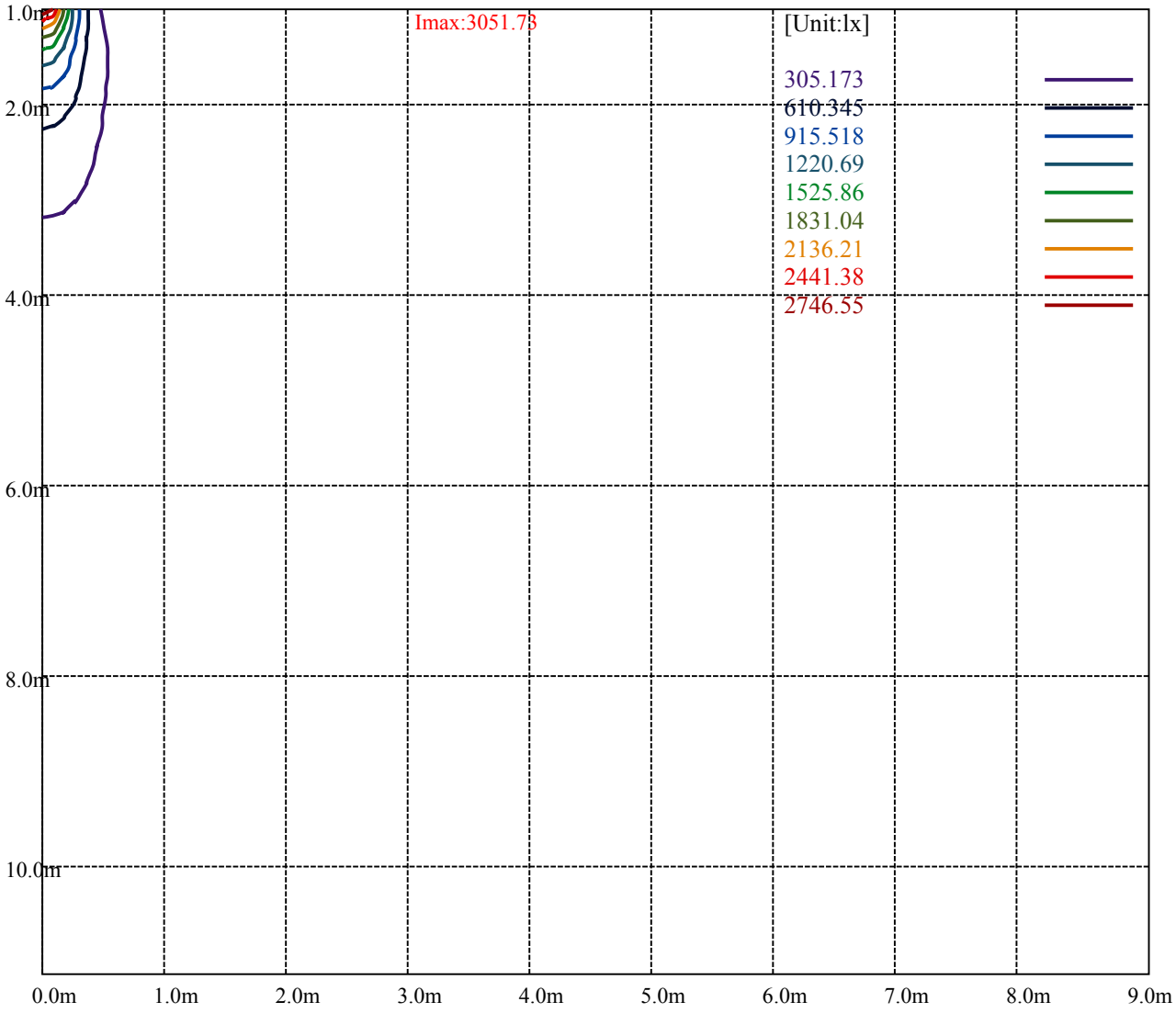
ISO illuminance diagram



(10%Emax) 76.29325
(20%Emax) 152.5862
(30%Emax) 228.8795
(40%Emax) 305.1725
(50%Emax) 381.465
(60%Emax) 457.76
(70%Emax) 534.0525
(80%Emax) 610.345
(90%Emax) 686.6375

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

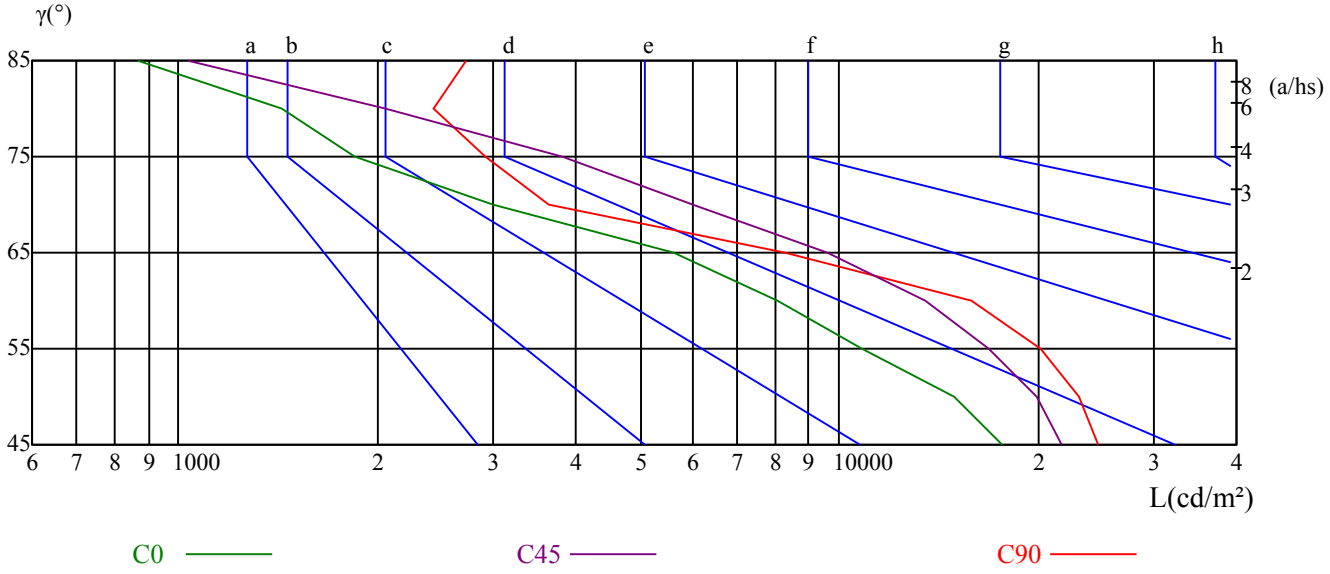
γ	45	50	55	60	65	70	75	80	85
C0	17707	14902	10843	8081	5637	2993	1851	1437	868
C45	21736	19918	16903	13532	9602	6004	3809	2064	1031
C90	24698	23118	20255	15854	8293	3645	2908	2436	2724

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

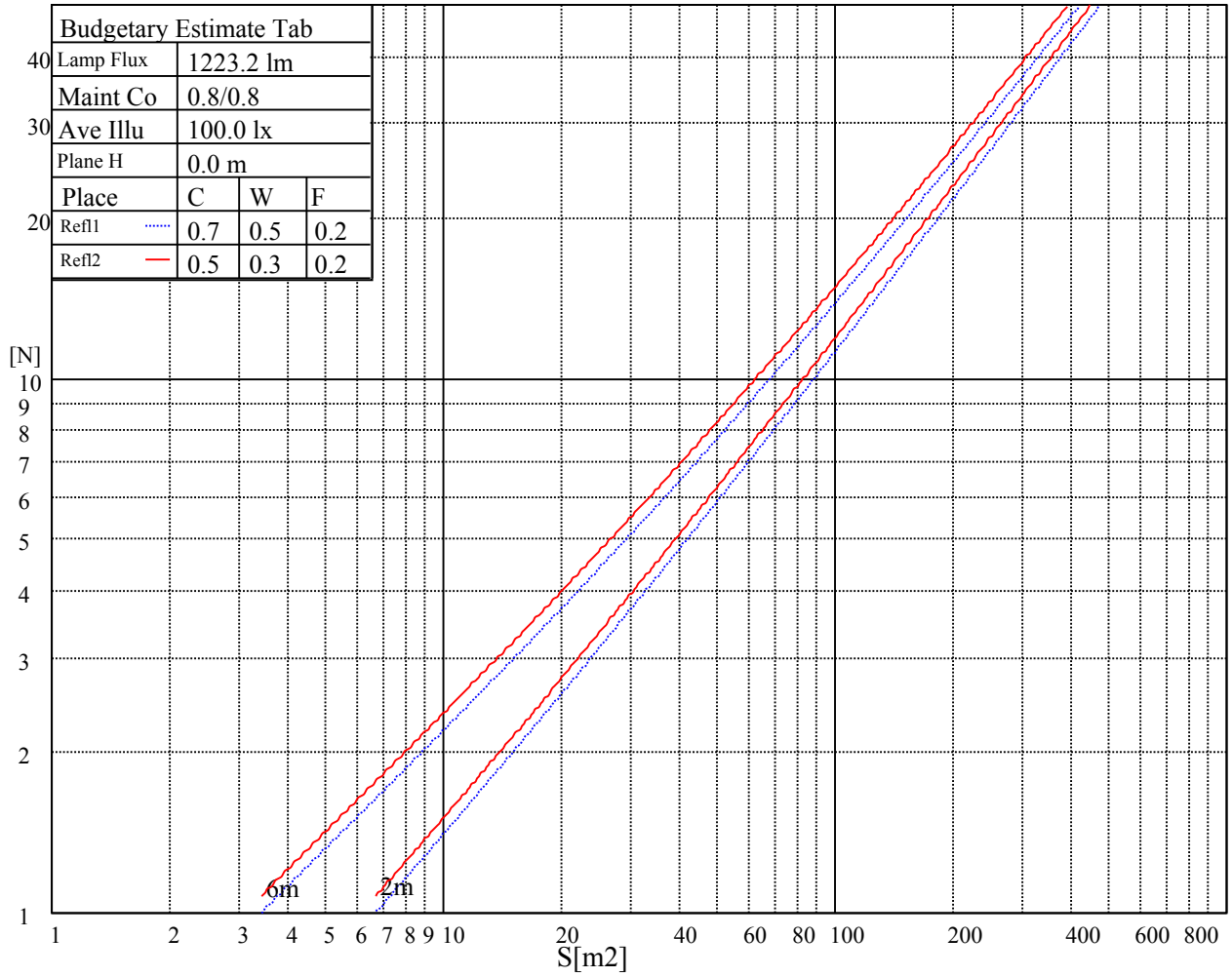
Luminance Limitting Curve



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

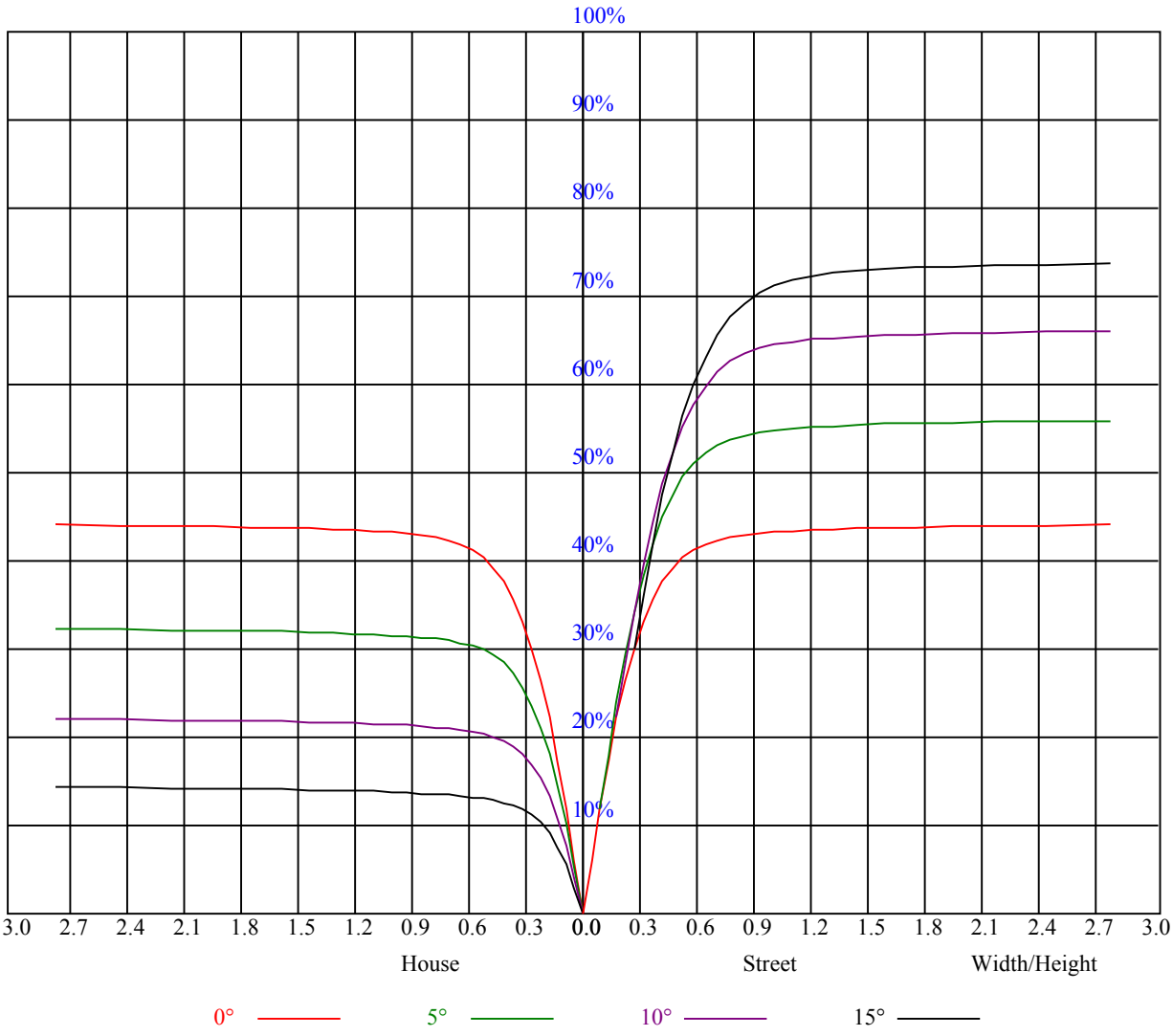


Equipment: GMS1980 Date: 2023/7/18 Operator: NT07
Temperature(°C): 25.0 Humidity(%): 60.0% Distance(m): 7.44

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	1.06	1.06	1.06	1.03	1.03	1.03	0.99	0.99	0.99	0.95	0.95	0.95	0.91	0.91	0.91	0.89
1	0.99	0.97	0.95	0.97	0.95	0.94	0.94	0.92	0.91	0.90	0.89	0.88	0.87	0.86	0.85	0.84
2	0.93	0.90	0.87	0.92	0.89	0.86	0.89	0.86	0.84	0.86	0.84	0.83	0.84	0.82	0.81	0.79
3	0.88	0.84	0.81	0.87	0.83	0.80	0.84	0.81	0.79	0.82	0.80	0.78	0.80	0.78	0.77	0.75
4	0.83	0.79	0.76	0.82	0.78	0.75	0.81	0.77	0.75	0.79	0.76	0.74	0.77	0.75	0.73	0.72
5	0.79	0.75	0.72	0.79	0.74	0.71	0.77	0.73	0.71	0.76	0.73	0.70	0.74	0.72	0.69	0.68
6	0.76	0.71	0.68	0.75	0.71	0.68	0.74	0.70	0.67	0.73	0.69	0.67	0.72	0.69	0.66	0.65
7	0.72	0.68	0.65	0.72	0.68	0.65	0.71	0.67	0.64	0.70	0.66	0.64	0.69	0.66	0.64	0.62
8	0.69	0.65	0.62	0.69	0.65	0.62	0.68	0.64	0.61	0.67	0.64	0.61	0.66	0.63	0.61	0.60
9	0.67	0.62	0.59	0.66	0.62	0.59	0.65	0.62	0.59	0.65	0.61	0.59	0.64	0.61	0.59	0.58
10	0.64	0.60	0.57	0.64	0.60	0.57	0.63	0.59	0.57	0.62	0.59	0.57	0.62	0.59	0.56	0.55

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	3039.41	3013.39	2968.56	2899.37	2825.75	2724.45	2577.76	2450.45	2311.51
45.0	3061.55	3046.61	3023.91	2977.97	2907.12	2837.37	2747.14	2609.31	2489.20
90.0	3049.37	3021.70	2972.43	2909.33	2835.71	2746.04	2604.33	2480.89	2341.96
135.0	3056.57	3058.23	3034.98	3006.75	2935.35	2864.49	2775.93	2672.97	2514.66
180.0	3039.41	3060.45	3063.21	3048.27	3020.04	2956.38	2890.51	2801.94	2702.31
225.0	3061.55	3062.11	3042.73	3010.63	2960.81	2868.92	2777.59	2666.33	2503.03
270.0	3049.37	3059.34	3050.48	3030.00	2981.29	2921.51	2842.35	2755.45	2617.62
315.0	3056.57	3046.61	3017.27	2978.52	2902.13	2829.07	2701.75	2589.94	2457.09
360.0	3039.41	3013.39	2968.56	2899.37	2825.75	2724.45	2577.76	2450.45	2311.51

C/γ(°)	9.0	10.0	11.0	12.0	13.0	14.0	15.0	16.0	17.0
0.0	2130.50	1986.59	1845.43	1677.71	1556.49	1454.08	1358.32	1270.86	1089.75
45.0	2314.28	2177.00	2033.08	1851.52	1716.46	1598.56	1491.17	1367.18	1278.06
90.0	2197.48	2010.39	1864.25	1728.08	1574.75	1465.15	1340.61	1194.48	1089.41
135.0	2374.06	2220.73	2024.23	1873.11	1693.76	1563.13	1447.44	1341.72	1222.15
180.0	2553.41	2410.04	2215.20	2054.67	1895.25	1711.48	1574.20	1443.57	1309.06
225.0	2355.79	2200.80	1996.00	1839.34	1693.21	1526.60	1409.80	1302.97	1092.40
270.0	2493.07	2349.15	2194.71	1997.66	1850.97	1708.16	1538.22	1414.23	1316.81
315.0	2313.17	2121.09	1974.96	1835.47	1697.09	1543.76	1431.94	1332.86	1091.02
360.0	2130.50	1986.59	1845.43	1677.71	1556.49	1454.08	1358.32	1270.86	1089.75

C/γ(°)	18.0	19.0	20.0	21.0	22.0	23.0	24.0	25.0	26.0
0.0	1089.75	1020.78	932.15	859.36	788.40	701.94	632.97	552.98	489.71
45.0	1200.56	1126.94	1039.49	971.40	903.32	814.75	743.90	658.65	592.78
90.0	1089.41	1002.79	936.58	867.78	797.37	713.12	646.36	584.42	506.37
135.0	1139.12	1063.84	990.22	904.98	833.57	761.06	692.42	607.17	542.96
180.0	1207.21	1113.66	1031.74	959.22	869.55	790.39	723.42	635.40	569.53
225.0	1092.40	1013.52	937.80	864.84	771.96	700.56	633.36	551.38	487.17
270.0	1200.01	1112.55	1035.06	943.17	866.23	789.29	706.26	633.19	566.77
315.0	1091.02	1053.66	977.27	887.04	814.09	727.29	661.36	595.16	517.94
360.0	1089.75	1020.78	932.15	859.36	788.40	701.94	632.97	552.98	489.71

C/γ(°)	27.0	28.0	29.0	30.0	31.0	32.0	33.0	34.0	35.0
0.0	432.09	378.07	313.85	268.46	226.40	189.92	156.32	124.93	107.16
45.0	530.79	469.90	400.15	347.01	298.85	287.23	231.93	166.34	138.55
90.0	446.09	391.96	338.43	281.03	239.02	199.55	157.81	130.19	109.82
135.0	466.58	409.56	358.08	299.96	288.89	288.89	169.16	140.21	116.63
180.0	510.86	437.24	381.88	319.33	285.57	285.57	189.70	151.78	126.59
225.0	426.50	359.47	310.64	255.51	214.94	180.07	150.12	126.10	106.17
270.0	505.32	434.47	378.01	327.64	283.36	283.36	187.65	156.48	126.26
315.0	460.65	404.36	350.78	292.21	249.04	208.96	173.42	137.50	116.35
360.0	432.09	378.07	313.85	268.46	226.40	189.92	156.32	124.93	107.16

C/γ(°)	36.0	37.0	38.0	39.0	40.0	41.0	42.0	43.0	44.0
0.0	94.77	83.31	75.50	66.92	60.72	54.86	47.94	42.84	38.36
45.0	117.79	100.25	90.61	81.48	70.58	63.71	57.62	50.65	45.78
90.0	92.77	82.92	73.84	63.66	56.68	50.98	45.83	40.24	36.37
135.0	100.30	85.13	76.50	68.20	60.34	52.03	46.83	42.01	36.87
180.0	108.38	94.88	83.09	75.00	67.03	60.06	52.42	47.16	42.46
225.0	93.82	84.97	77.11	67.86	61.00	54.63	47.88	43.18	37.92
270.0	108.71	93.94	85.13	77.05	69.75	61.17	55.08	49.60	44.62
315.0	101.57	89.12	81.09	73.18	64.54	58.29	52.59	45.94	41.13
360.0	94.77	83.31	75.50	66.92	60.72	54.86	47.94	42.84	38.36

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	34.26	29.89	27.01	24.69	22.69	20.59	19.21	17.99	16.77
45.0	41.24	36.15	32.66	29.67	27.12	24.47	22.69	21.15	19.76
90.0	32.88	29.78	26.51	24.41	22.09	20.54	19.21	17.82	16.83
135.0	33.32	30.06	26.63	24.36	22.53	20.43	19.21	18.05	17.05
180.0	37.36	33.77	29.95	27.34	25.19	23.25	21.37	20.04	18.88
225.0	34.21	30.83	27.34	25.02	23.08	21.37	19.54	18.32	17.21
270.0	39.13	35.37	31.99	29.01	25.91	23.80	22.09	20.15	18.82
315.0	36.81	33.16	29.23	26.63	24.47	22.69	20.70	19.37	18.21
360.0	34.26	29.89	27.01	24.69	22.69	20.59	19.21	17.99	16.77

C/γ(°)	54.0	55.0	56.0	57.0	58.0	59.0	60.0	61.0	62.0
0.0	15.94	15.22	14.39	13.84	13.23	12.79	12.40	12.01	11.68
45.0	18.38	17.44	16.66	15.72	15.06	14.34	13.78	13.28	12.84
90.0	16.00	15.11	14.50	13.95	13.45	13.01	12.51	12.07	11.73
135.0	16.05	15.33	14.72	14.12	13.51	13.12	12.68	12.18	11.85
180.0	17.82	16.72	15.94	15.28	14.72	14.06	13.62	13.06	12.68
225.0	16.33	15.33	14.61	14.00	13.34	12.90	12.45	11.96	11.57
270.0	17.44	16.61	15.72	14.83	14.23	13.67	13.23	12.79	12.29
315.0	16.99	16.16	15.28	14.61	14.06	13.62	13.06	12.62	12.23
360.0	15.94	15.22	14.39	13.84	13.23	12.79	12.40	12.01	11.68

C/γ(°)	63.0	64.0	65.0	66.0	67.0	68.0	69.0	70.0	71.0
0.0	11.24	10.85	10.52	10.13	9.63	9.24	8.86	8.41	8.14
45.0	12.29	11.85	11.46	11.07	10.52	10.13	9.74	9.19	8.80
90.0	11.29	10.90	10.46	10.07	9.69	9.30	8.86	8.47	8.19
135.0	11.35	11.02	10.74	10.41	9.96	9.63	9.30	8.91	8.41
180.0	12.23	11.85	11.46	11.13	10.74	10.30	9.91	9.47	9.13
225.0	11.24	10.85	10.52	10.19	9.85	9.41	9.08	8.69	8.30
270.0	11.90	11.57	11.18	10.79	10.41	9.96	9.63	9.19	8.75
315.0	11.85	11.40	11.02	10.68	10.30	9.80	9.41	8.91	8.52
360.0	11.24	10.85	10.52	10.13	9.63	9.24	8.86	8.41	8.14

C/γ(°)	72.0	73.0	74.0	75.0	76.0	77.0	78.0	79.0	80.0
0.0	7.75	7.53	7.31	6.97	6.70	6.48	6.25	6.03	5.81
45.0	8.47	8.08	7.80	7.47	7.20	6.97	6.75	6.48	6.25
90.0	7.92	7.58	7.31	7.09	6.86	6.59	6.37	6.09	5.87
135.0	8.14	7.86	7.53	7.31	7.03	6.75	6.53	6.37	6.09
180.0	8.69	8.36	8.08	7.69	7.47	7.14	6.92	6.59	6.37
225.0	7.92	7.64	7.31	7.09	6.86	6.53	6.37	6.09	5.87
270.0	8.41	8.08	7.80	7.42	7.20	6.97	6.64	6.42	6.20
315.0	8.19	7.80	7.53	7.31	6.97	6.75	6.53	6.25	6.03
360.0	7.75	7.53	7.31	6.97	6.70	6.48	6.25	6.03	5.81

C/γ(°)	81.0	82.0	83.0	84.0	85.0	86.0	87.0	88.0	89.0
0.0	5.65	5.48	5.31	5.20	5.04	4.93	4.76	4.65	4.54
45.0	5.98	5.76	5.59	5.42	5.26	5.09	4.93	4.76	4.59
90.0	5.70	5.54	5.37	5.26	5.04	4.87	4.71	4.59	4.48
135.0	5.92	5.70	5.54	5.37	5.20	4.98	4.87	4.71	4.54
180.0	6.09	5.92	5.70	5.54	5.37	5.20	5.09	4.87	4.76
225.0	5.70	5.54	5.42	5.20	5.09	4.98	4.82	4.71	4.54
270.0	5.98	5.76	5.48	5.31	5.20	5.09	4.93	4.76	4.65
315.0	5.81	5.59	5.42	5.31	5.15	4.98	4.87	4.71	4.54
360.0	5.65	5.48	5.31	5.20	5.04	4.93	4.76	4.65	4.54

Intensity data(cd)

C/γ(°)	90.0
0.0	4.54
45.0	4.54
90.0	4.48
135.0	4.48
180.0	4.59
225.0	4.48
270.0	4.48
315.0	4.54
360.0	4.54