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: 2-2639-L
Luminaire: 92.70.411.00
Report No: 2023718-B001
Ballast type: AC

Test No: 2023718-C001	Voltage(V): 34.750
LampCAT: SLM C 1208 L15 2024 G7 HE+	Current(A): 0.500
Lamp flux(lm): 3273.2	Power (W): 20.155
Number of Lamps: 1	PF: 0.000
Length(mm): 0	Width(mm): 0
Phm Type: C	Height(mm): 0

Photometric Results

Lumens(lm): 3069.32, Efficiency(%): 93.77% , Luminous Efficacy(lm/W): 152.29
Central intensity(cd): 12111.090, Maximum intensity(cd): 12111.090
Angle of maximum intensity: C=0.0 γ=0.0
Beam Angle(50%Imax): [C0/180]Total=21.6
[C90/270]Total=21.6
Field angle(10%Imax): [C0/180]Total=55.6
[C90/270]Total=55.6
Maximum s/h(1/2): C0_180=0.37 C90_270=0.37
Maximum s/h(1/4): C0_180=0.41 C90_270=0.41
Up flux rate of lamp(%): 0.00%
Down flux rate of lamp(%): 93.77%
Up flux rate of LUM(%): - -
Down flux rate of LUM(%): 100.00%
CIE Type : Direct lighting
Output flux ratio in π solid angle : 97.984%

Zonal flux distribution table

γ(°)	Average I(cd)	Zonal F(lm)	Sum F(lm)	Eff Flux(%)	Eff Sum(%)
0.0	12111.091	0.000	0	0.00%	0.00%
1.0	11925.303	11.501	11.501	0.35%	0.37%
2.0	11720.765	33.939	45.44	1.04%	1.48%
3.0	11346.422	55.169	100.609	1.69%	3.28%
4.0	10938.120	74.593	175.203	2.28%	5.71%
5.0	10383.616	91.725	266.928	2.80%	8.70%
6.0	9693.426	105.510	372.438	3.22%	12.13%
7.0	8939.164	115.652	488.09	3.53%	15.90%
8.0	8118.823	122.081	610.171	3.73%	19.88%
9.0	7373.210	125.555	735.725	3.84%	23.97%
10.0	6603.034	126.480	862.205	3.86%	28.09%
11.0	5943.219	125.363	987.568	3.83%	32.18%
12.0	5326.234	123.191	1110.759	3.76%	36.19%
13.0	4745.436	119.525	1230.285	3.65%	40.08%
14.0	4251.198	115.156	1345.441	3.52%	43.84%
15.0	3821.446	110.825	1456.266	3.39%	47.45%
16.0	3424.630	106.175	1562.441	3.24%	50.91%
17.0	3068.361	101.113	1663.554	3.09%	54.20%
18.0	2800.657	96.767	1760.322	2.96%	57.35%
19.0	2568.995	93.421	1853.743	2.85%	60.40%
20.0	2415.942	91.238	1944.981	2.79%	63.37%
21.0	2135.694	87.401	2032.381	2.67%	66.22%
22.0	1955.034	82.205	2114.586	2.51%	68.89%
23.0	1818.726	79.184	2193.77	2.42%	71.47%
24.0	1694.733	76.817	2270.587	2.35%	73.98%
25.0	1580.567	74.473	2345.06	2.28%	76.40%
26.0	1434.931	71.181	2416.241	2.17%	78.72%
27.0	1301.654	66.951	2483.192	2.05%	80.90%
28.0	1189.992	63.083	2546.275	1.93%	82.96%
29.0	1087.491	59.585	2605.861	1.82%	84.90%
30.0	964.903	55.414	2661.275	1.69%	86.71%
31.0	844.696	50.359	2711.634	1.54%	88.35%
32.0	727.007	45.027	2756.661	1.38%	89.81%
33.0	608.689	39.350	2796.011	1.20%	91.10%
34.0	493.962	33.369	2829.381	1.02%	92.18%
35.0	391.343	27.494	2856.875	0.84%	93.08%
36.0	308.832	22.294	2879.169	0.68%	93.80%
37.0	243.106	18.001	2897.17	0.55%	94.39%

Zonal flux distribution table

γ(°)	Average I(cd)	Zonal F(lm)	Sum F(lm)	Eff Flux(%)	Eff Sum(%)
38.0	186.756	14.348	2911.518	0.44%	94.86%
39.0	133.568	10.934	2922.451	0.33%	95.22%
40.0	87.431	7.708	2930.159	0.24%	95.47%
41.0	72.167	5.683	2935.842	0.17%	95.65%
42.0	65.020	4.984	2940.827	0.15%	95.81%
43.0	59.367	4.608	2945.434	0.14%	95.96%
44.0	54.413	4.294	2949.728	0.13%	96.10%
45.0	50.316	4.025	2953.753	0.12%	96.23%
46.0	47.051	3.808	2957.561	0.12%	96.36%
47.0	44.594	3.645	2961.206	0.11%	96.48%
48.0	42.809	3.533	2964.739	0.11%	96.59%
49.0	41.238	3.451	2968.191	0.11%	96.71%
50.0	39.951	3.385	2971.576	0.10%	96.82%
51.0	38.997	3.340	2974.916	0.10%	96.92%
52.0	38.367	3.320	2978.236	0.10%	97.03%
53.0	38.056	3.324	2981.56	0.10%	97.14%
54.0	38.215	3.362	2984.922	0.10%	97.25%
55.0	38.754	3.436	2988.358	0.10%	97.36%
56.0	39.751	3.547	2991.905	0.11%	97.48%
57.0	40.955	3.690	2995.595	0.11%	97.60%
58.0	42.124	3.842	2999.437	0.12%	97.72%
59.0	42.830	3.972	3003.409	0.12%	97.85%
60.0	42.518	4.032	3007.441	0.12%	97.98%
61.0	41.155	3.993	3011.434	0.12%	98.11%
62.0	38.422	3.835	3015.268	0.12%	98.24%
63.0	34.361	3.540	3018.808	0.11%	98.35%
64.0	30.265	3.171	3021.979	0.10%	98.46%
65.0	26.860	2.827	3024.806	0.09%	98.55%
66.0	24.134	2.544	3027.351	0.08%	98.63%
67.0	22.377	2.339	3029.689	0.07%	98.71%
68.0	21.221	2.209	3031.898	0.07%	98.78%
69.0	20.391	2.123	3034.021	0.06%	98.85%
70.0	19.768	2.062	3036.083	0.06%	98.92%
71.0	19.111	2.009	3038.093	0.06%	98.98%
72.0	18.592	1.960	3040.053	0.06%	99.05%
73.0	18.087	1.918	3041.971	0.06%	99.11%
74.0	17.616	1.877	3043.848	0.06%	99.17%
75.0	17.215	1.840	3045.689	0.06%	99.23%

Zonal flux distribution table

γ(°)	Average I(cd)	Zonal F(lm)	Sum F(lm)	Eff Flux(%)	Eff Sum(%)
76.0	16.807	1.806	3047.495	0.06%	99.29%
77.0	16.482	1.775	3049.269	0.05%	99.35%
78.0	16.149	1.747	3051.016	0.05%	99.40%
79.0	15.790	1.716	3052.732	0.05%	99.46%
80.0	15.395	1.681	3054.413	0.05%	99.51%
81.0	15.049	1.646	3056.06	0.05%	99.57%
82.0	14.634	1.610	3057.67	0.05%	99.62%
83.0	14.219	1.568	3059.238	0.05%	99.67%
84.0	13.852	1.529	3060.767	0.05%	99.72%
85.0	13.499	1.493	3062.26	0.05%	99.77%
86.0	13.202	1.460	3063.72	0.04%	99.82%
87.0	12.946	1.431	3065.151	0.04%	99.86%
88.0	12.724	1.406	3066.557	0.04%	99.91%
89.0	12.565	1.386	3067.943	0.04%	99.96%
90.0	12.482	1.373	3069.316	0.04%	100.00%

Zonal flux distribution table

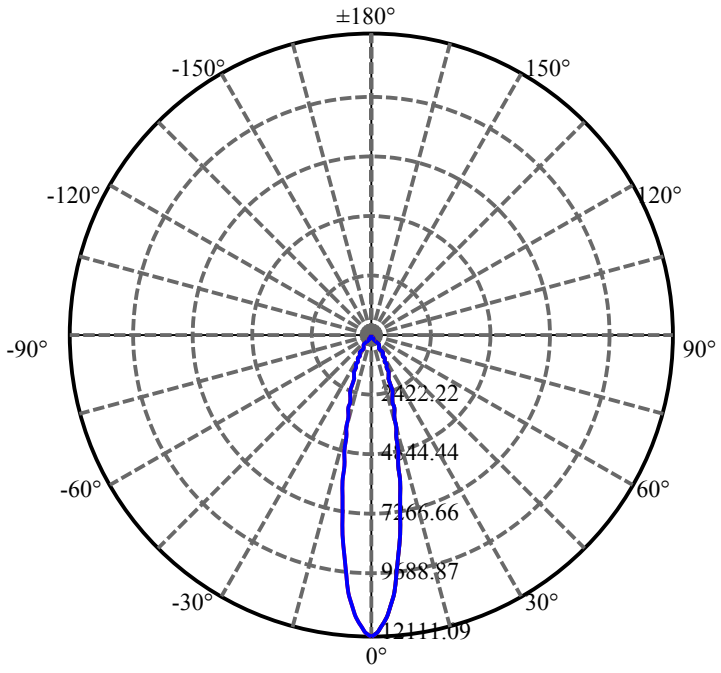
ZONAL LUMEN SUMMARY

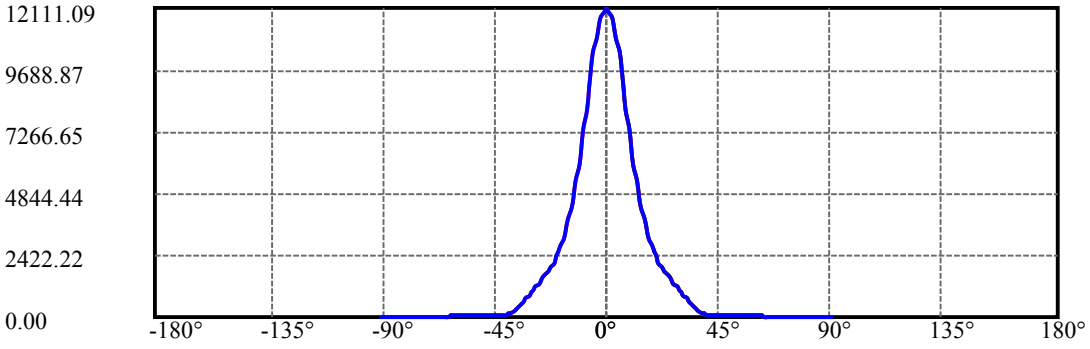
Zone	Lumens	%Lamp	%Fixt
0-30	2661.27	81.30%	86.71%
0-40	2930.16	89.52%	95.47%
0-60	3007.44	91.88%	97.98%
0-90	3067.94	93.73%	99.96%
0-120	3067.94	93.73%	99.96%
0-180	3069.32	93.77%	100.00%
60-90	60.50	1.85%	1.97%
90-120	0.00	0.00%	0.00%
90-130	0.00	0.00%	0.00%
90-150	0.00	0.00%	0.00%
90-180	0.00	0.00%	0.00%
0-26.59	2455.45	75.02%	80.00%

ZONAL LUMEN SUMMARY

0-10	862.21
10-20	1082.78
20-30	716.29
30-40	268.88
40-50	41.42
50-60	35.86
60-70	28.64
70-80	18.33
80-90	13.53
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):

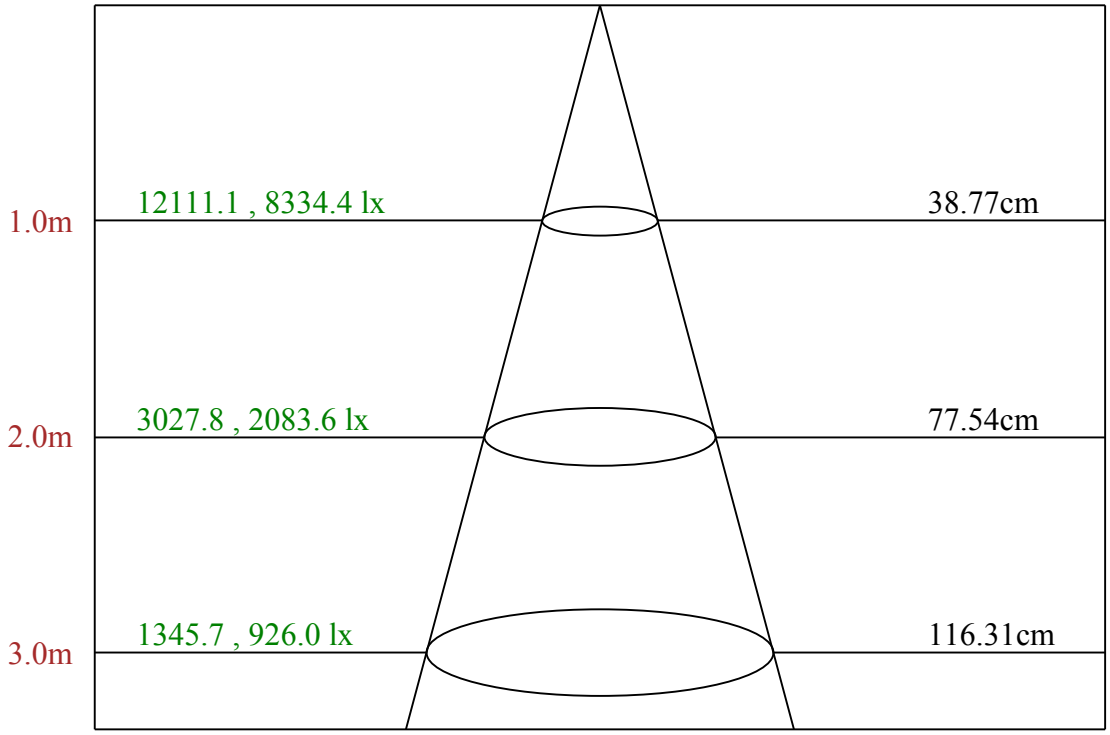
C0/C180:

C90/C270:

Field angle(10%Imax):C0/180Left:27.8 Right:27.8
:C90/270Left:27.8 Right:27.8

Beam Angle(50%Imax):C0/180Left:10.8 Right:10.8
:C90/270Left:10.8 Right:10.8

Lux distance Curve

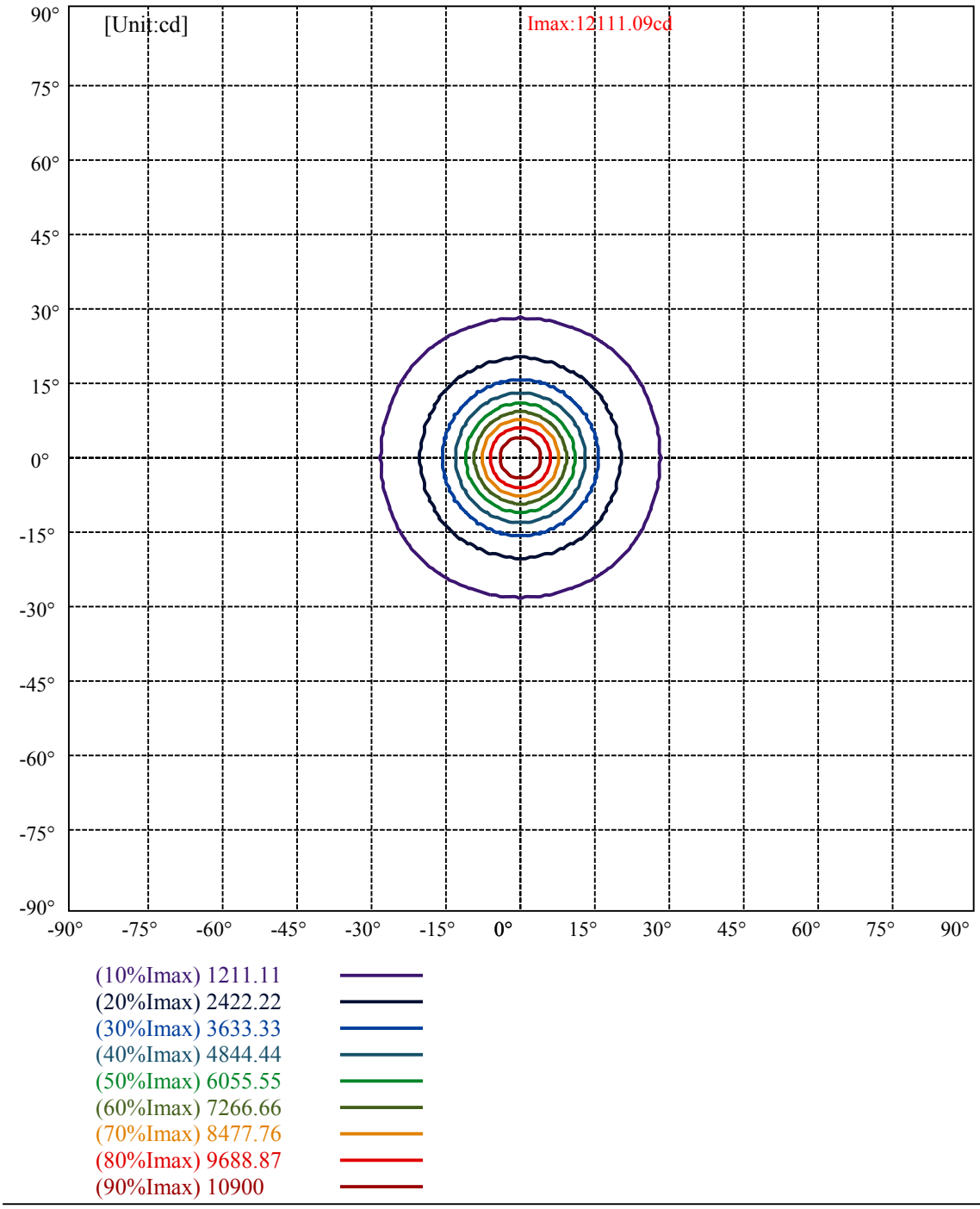


Max , Ave

Beam angle of C0 plane 21.94

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

ISO-Intensity(V-H)

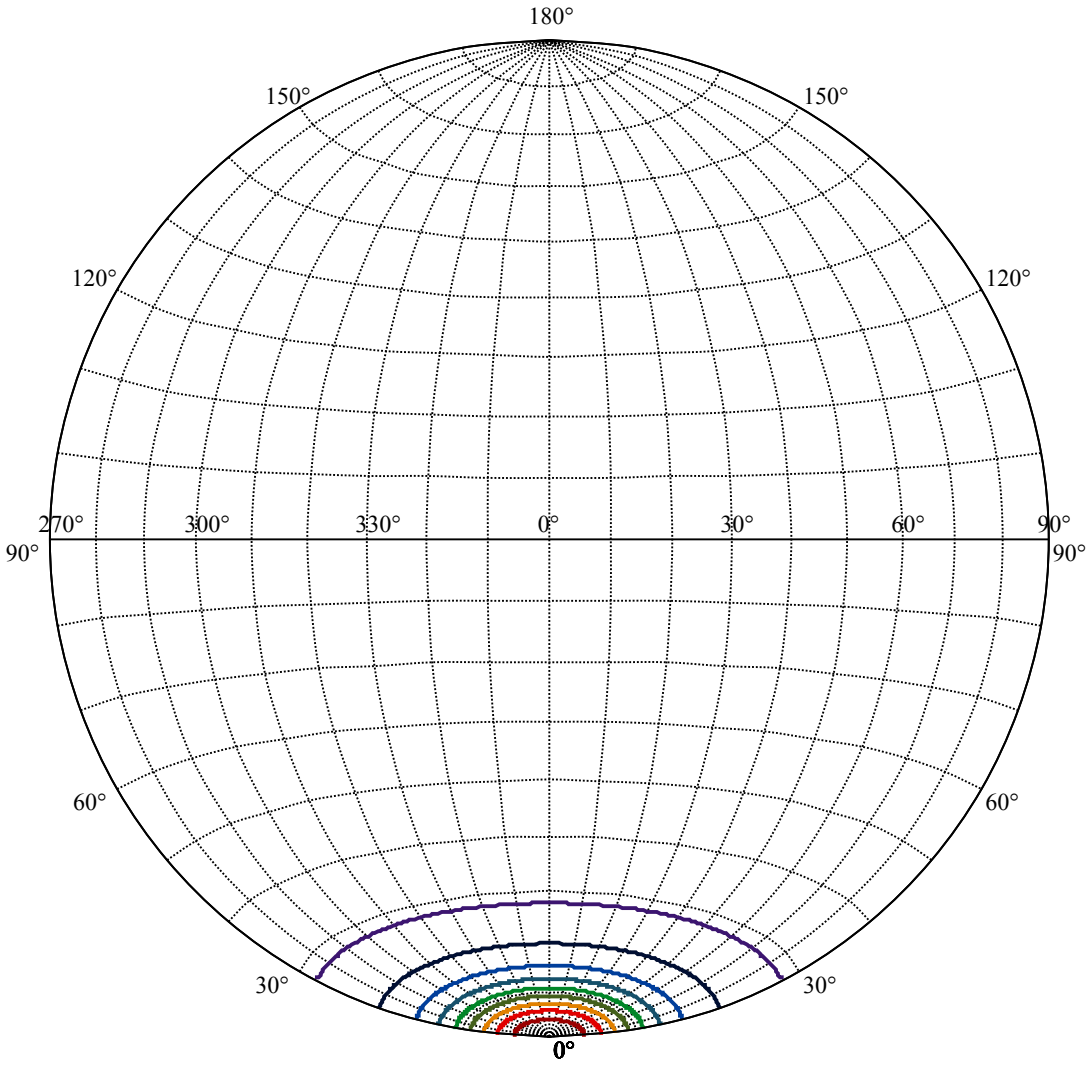


Equipment: GMS1980
Temperature(°C): 25.0

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

Operator: NT07
Distance(m): 7.44

ISO candela diagram on circular web



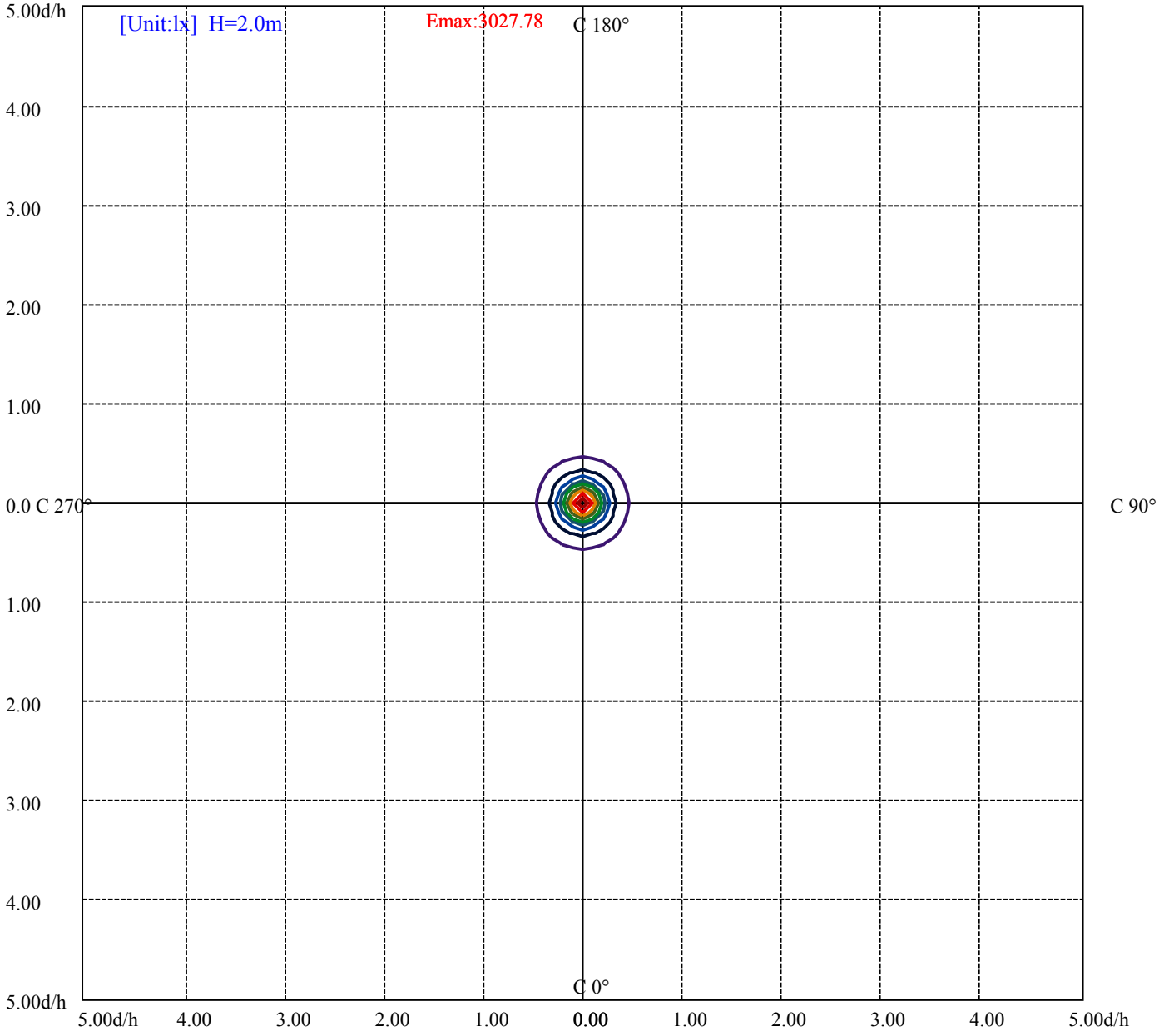
[Unit:cd]

Imax:12111.09

(10%Imax) 1211.11
(20%Imax) 2422.22
(30%Imax) 3633.33
(40%Imax) 4844.44
(50%Imax) 6055.55
(60%Imax) 7266.66
(70%Imax) 8477.76
(80%Imax) 9688.87
(90%Imax) 10900

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

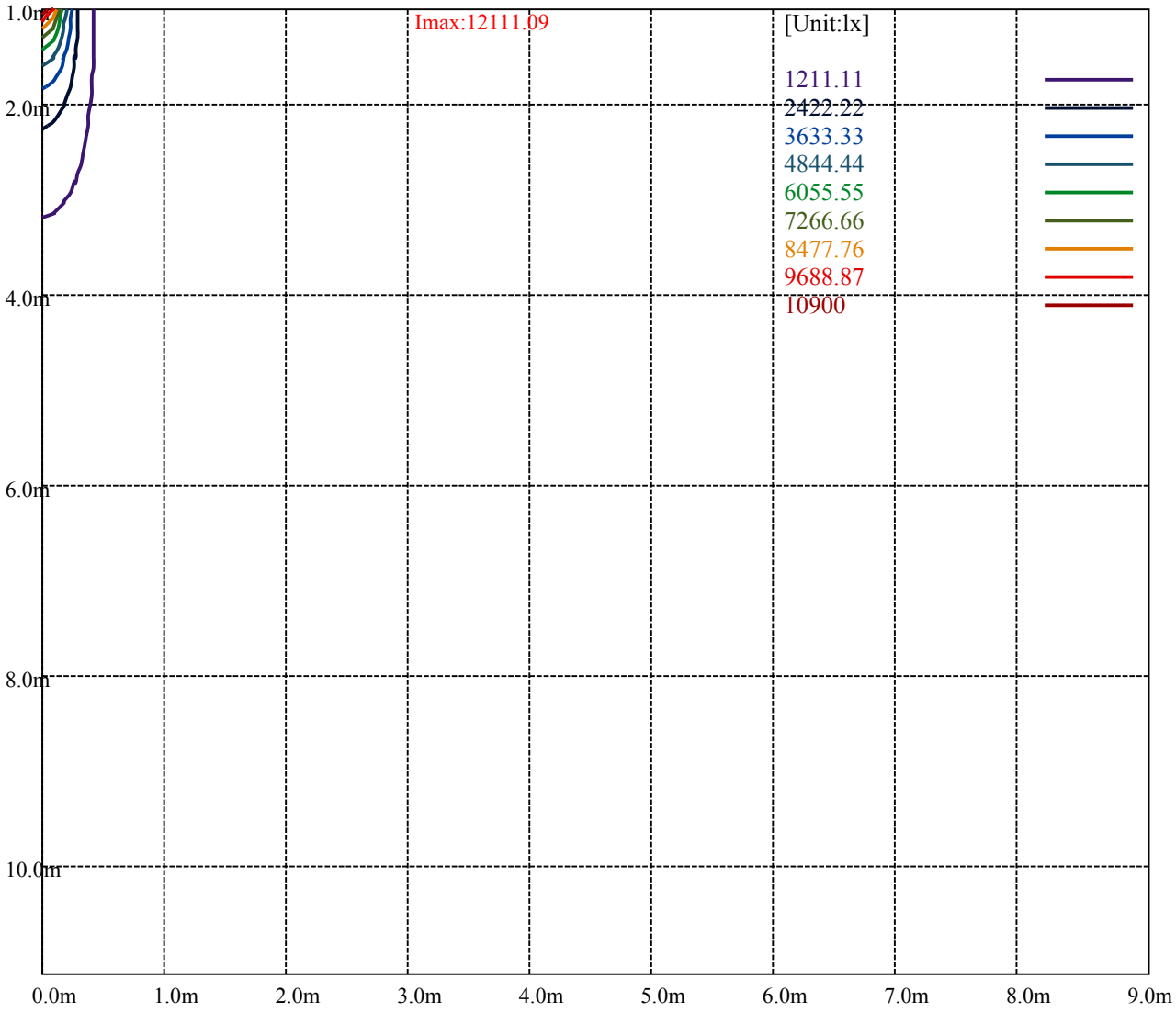
ISO illuminance diagram



(10%Emax) 302.7775
(20%Emax) 605.5525
(30%Emax) 908.33
(40%Emax) 1211.108
(50%Emax) 1513.882
(60%Emax) 1816.66
(70%Emax) 2119.435
(80%Emax) 2422.212
(90%Emax) 2725

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

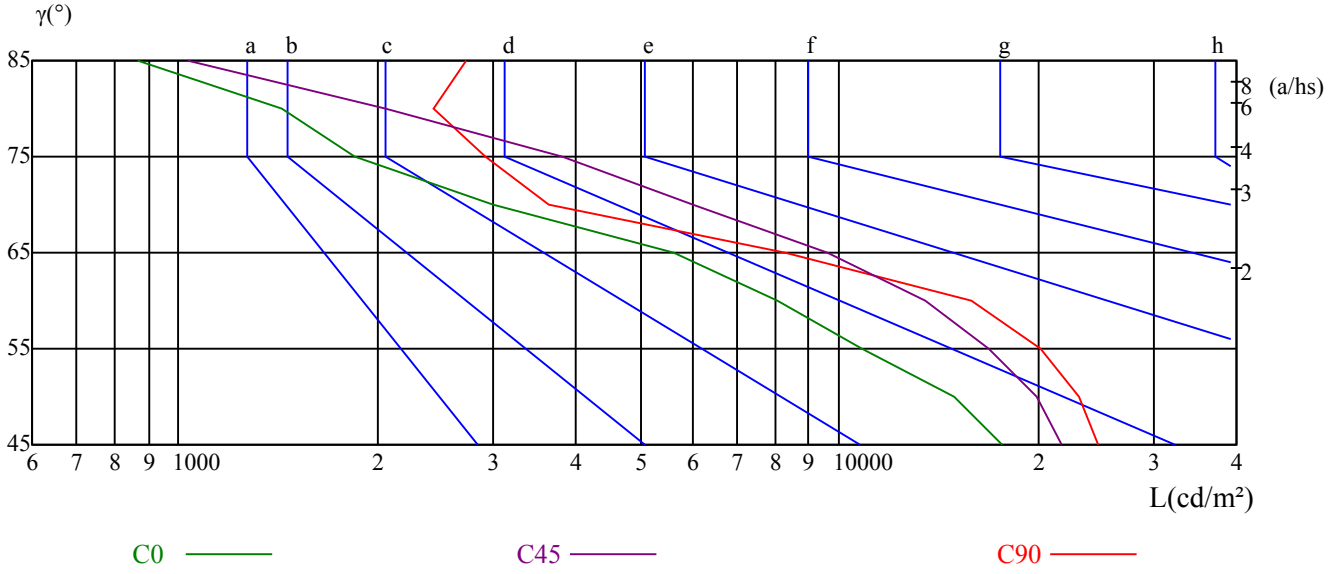
γ	45	50	55	60	65	70	75	80	85
C0	17707	14902	10843	8081	5637	2993	1851	1437	868
C45	21736	19918	16903	13532	9602	6004	3809	2064	1031
C90	24698	23118	20255	15854	8293	3645	2908	2436	2724

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

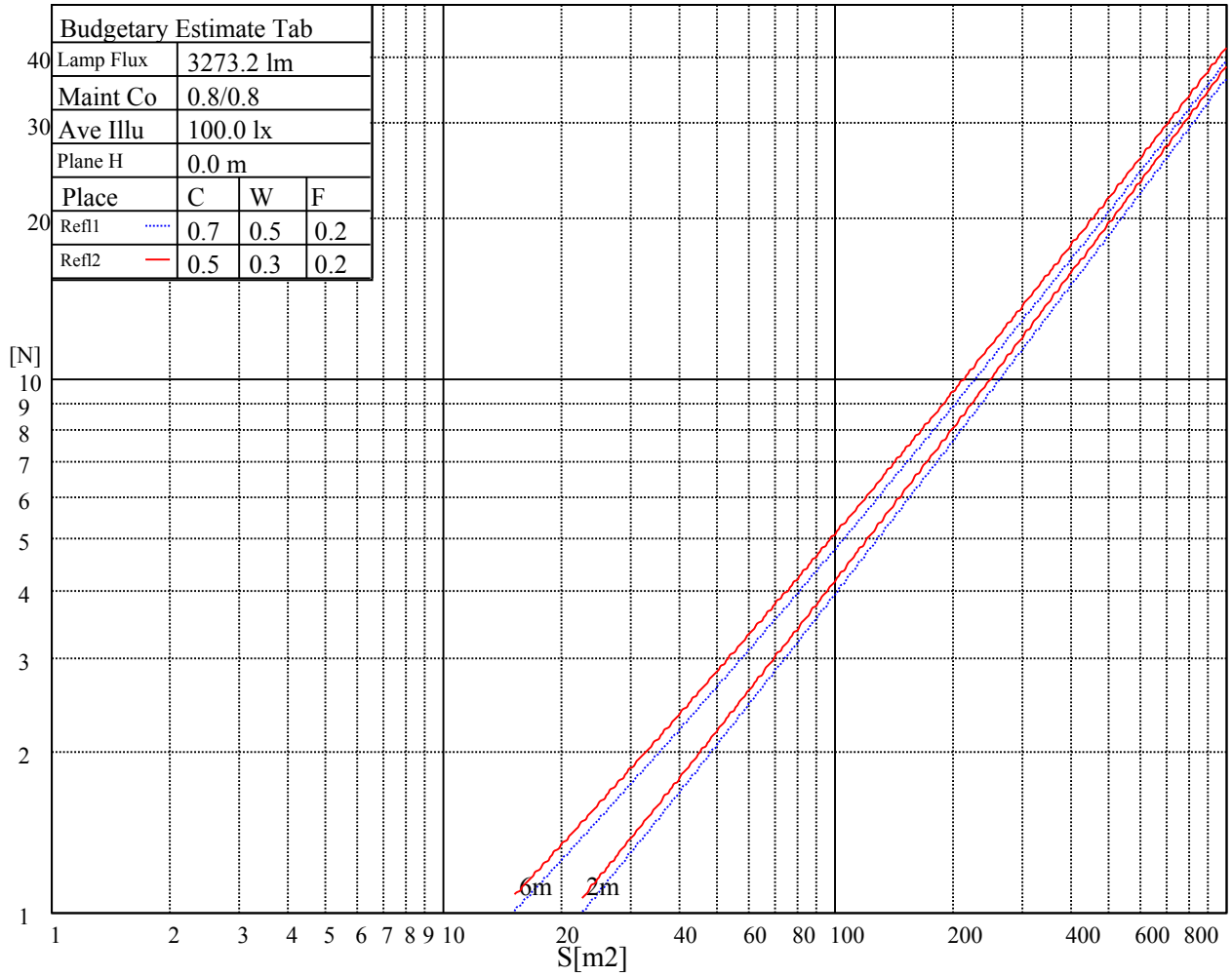


UGR Glare

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

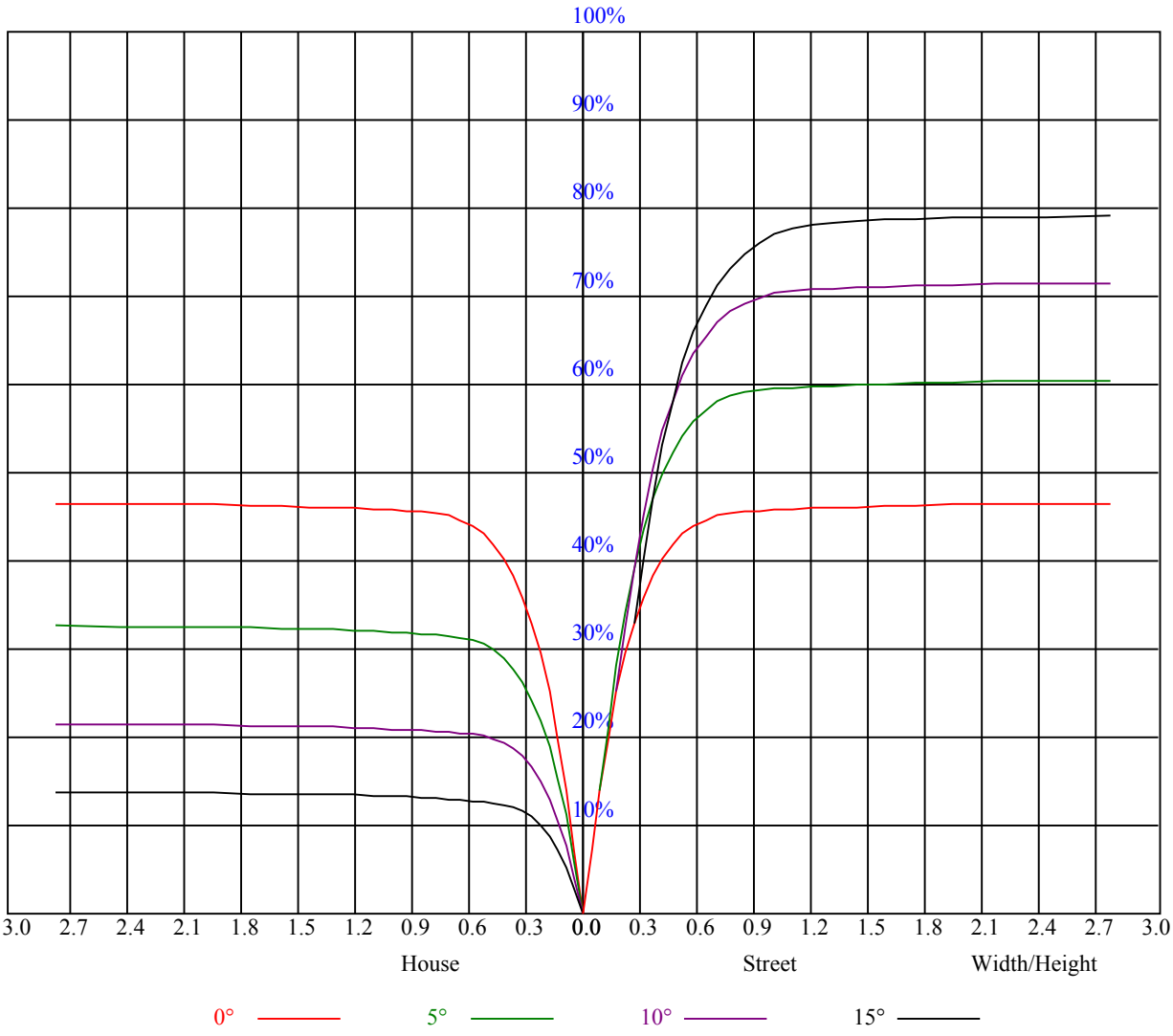


Equipment: GMS1980 Date: 2023/7/18 Operator: NT07
Temperature(°C): 25.0 Humidity(%): 60.0% Distance(m): 7.44

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	1.12	1.12	1.12	1.09	1.09	1.09	1.04	1.04	1.04	1.00	1.00	1.00	0.96	0.96	0.96	0.94
1	1.05	1.03	1.01	1.03	1.01	0.99	0.99	0.97	0.96	0.95	0.94	0.93	0.92	0.91	0.91	0.89
2	0.99	0.96	0.93	0.97	0.94	0.92	0.94	0.92	0.90	0.92	0.90	0.88	0.89	0.87	0.86	0.85
3	0.94	0.90	0.87	0.92	0.89	0.86	0.90	0.87	0.85	0.88	0.85	0.83	0.86	0.84	0.82	0.81
4	0.89	0.85	0.81	0.88	0.84	0.81	0.86	0.83	0.80	0.84	0.82	0.79	0.83	0.80	0.78	0.77
5	0.85	0.81	0.77	0.84	0.80	0.77	0.83	0.79	0.76	0.81	0.78	0.76	0.80	0.77	0.75	0.74
6	0.81	0.77	0.74	0.81	0.76	0.73	0.79	0.76	0.73	0.78	0.75	0.72	0.77	0.74	0.72	0.71
7	0.78	0.74	0.70	0.78	0.73	0.70	0.76	0.73	0.70	0.75	0.72	0.70	0.74	0.71	0.69	0.68
8	0.75	0.71	0.68	0.75	0.70	0.67	0.74	0.70	0.67	0.73	0.69	0.67	0.72	0.69	0.67	0.66
9	0.72	0.68	0.65	0.72	0.68	0.65	0.71	0.67	0.65	0.70	0.67	0.64	0.70	0.67	0.64	0.63
10	0.70	0.66	0.63	0.70	0.65	0.63	0.69	0.65	0.62	0.68	0.65	0.62	0.68	0.64	0.62	0.61

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	11990.70	10963.83	10963.83	10666.03	10002.89	9283.30	8352.80	7609.40	6892.57
45.0	12167.83	11985.16	11713.93	11309.85	10634.53	9975.83	9261.76	8525.56	7617.76
90.0	12095.87	11719.46	11007.56	11007.56	10236.49	9563.39	8861.50	7931.01	7205.88
135.0	12189.97	12173.36	12018.37	11730.53	11210.21	10645.60	10009.04	9139.99	8409.32
180.0	11990.70	12162.29	12167.83	12079.26	11819.10	11365.20	10861.48	10230.45	9355.87
225.0	12167.83	12162.29	12018.37	11001.47	11001.47	10858.66	10070.98	9355.26	8601.89
270.0	12095.87	12173.36	12140.15	11974.09	11597.69	11160.39	10606.86	9959.22	9051.42
315.0	12189.97	12062.66	11736.07	11002.58	11002.58	10216.56	9522.98	8762.42	7815.87
360.0	11990.70	10963.83	10963.83	10666.03	10002.89	9283.30	8352.80	7609.40	6892.57

C/γ(°)	9.0	10.0	11.0	12.0	13.0	14.0	15.0	16.0	17.0
0.0	6231.10	5490.47	4961.29	4469.19	3915.66	3524.31	3177.24	2797.52	2546.21
45.0	6909.24	6250.53	5647.17	4971.86	4484.75	4036.38	3538.20	3183.94	2885.03
90.0	6515.06	5730.15	5159.45	4647.43	4180.25	3668.78	3308.43	2992.36	2732.75
135.0	7684.19	6776.39	6117.68	5525.40	4872.22	4385.11	3953.35	3560.34	3150.73
180.0	8630.73	7877.92	7141.72	6283.74	5663.78	5132.39	4634.20	4075.13	3665.52
225.0	7659.22	6923.57	6248.81	5636.05	4972.36	4480.82	4044.08	3645.53	3213.77
270.0	8298.61	7562.41	6665.68	6006.97	5414.69	4767.05	4296.55	3870.32	3394.28
315.0	7057.53	6212.83	5603.94	5069.23	4459.78	4014.74	3619.52	3271.90	2958.59
360.0	6231.10	5490.47	4961.29	4469.19	3915.66	3524.31	3177.24	2797.52	2546.21

C/γ(°)	18.0	19.0	20.0	21.0	22.0	23.0	24.0	25.0	26.0
0.0	2330.33	2110.02	1963.34	1828.83	1712.03	1590.81	1495.05	1390.98	1097.16
45.0	2813.07	2529.05	2175.89	1983.26	1848.75	1733.07	1627.34	1506.12	1400.94
90.0	2453.22	2265.01	2070.72	1926.80	1799.49	1663.32	1562.58	1462.94	1234.33
135.0	2873.96	2813.07	2813.07	2203.02	2046.92	1910.75	1758.53	1650.04	1547.63
180.0	3327.86	2934.85	2862.89	2589.94	2224.05	2055.78	1879.75	1764.06	1653.36
225.0	2908.78	2649.72	2380.15	2200.80	2003.19	1866.47	1744.69	1636.75	1514.97
270.0	3084.30	2857.35	2857.35	2308.74	2134.93	1980.50	1847.09	1708.16	1606.31
315.0	2613.74	2392.88	2204.12	2044.15	1870.90	1749.12	1642.84	1525.49	1424.75
360.0	2330.33	2110.02	1963.34	1828.83	1712.03	1590.81	1495.05	1390.98	1097.16

C/γ(°)	27.0	28.0	29.0	30.0	31.0	32.0	33.0	34.0	35.0
0.0	1097.16	1009.98	892.63	748.10	637.89	531.95	409.84	320.28	222.85
45.0	1283.59	1163.48	1015.13	900.55	787.07	650.90	549.05	428.38	338.71
90.0	1077.35	1077.35	957.62	811.59	700.50	592.23	491.43	371.59	284.41
135.0	1414.23	1298.54	1149.64	1030.08	908.30	790.39	678.58	544.07	441.67
180.0	1550.40	1449.10	1310.16	1190.60	1068.82	946.49	797.04	684.12	549.61
225.0	1407.03	1075.85	1075.85	1013.97	896.40	779.49	670.72	541.03	445.82
270.0	1504.46	1366.63	1250.38	1125.28	975.83	855.71	711.79	602.19	502.56
315.0	1079.01	1079.01	1048.51	899.05	782.76	668.89	561.06	460.04	345.13
360.0	1097.16	1009.98	892.63	748.10	637.89	531.95	409.84	320.28	222.85

C/γ(°)	36.0	37.0	38.0	39.0	40.0	41.0	42.0	43.0	44.0
0.0	161.58	116.08	89.89	77.22	69.03	63.55	58.73	54.41	49.93
45.0	297.19	297.19	116.46	87.74	75.23	68.80	62.05	57.12	53.14
90.0	210.23	149.90	97.48	77.33	68.36	62.60	57.62	52.09	48.77
135.0	346.46	281.14	281.14	117.24	88.18	72.79	66.15	60.61	54.03
180.0	449.97	354.76	289.44	289.44	124.05	86.52	74.06	67.70	62.44
225.0	333.12	253.13	183.39	117.96	88.01	74.34	67.20	60.22	55.02
270.0	407.90	298.30	298.30	205.92	107.61	78.88	70.96	64.32	59.01
315.0	264.20	194.35	137.94	95.71	78.99	69.86	63.38	58.45	52.97
360.0	161.58	116.08	89.89	77.22	69.03	63.55	58.73	54.41	49.93

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	47.44	45.00	43.34	41.90	40.41	39.41	38.80	38.42	38.69
45.0	49.87	46.72	44.84	43.23	41.63	40.63	39.63	39.08	38.86
90.0	46.00	44.06	41.96	40.68	39.69	38.86	38.30	38.14	38.36
135.0	50.04	46.11	43.73	42.01	40.41	38.86	37.92	37.31	36.98
180.0	56.13	52.09	48.99	46.39	44.12	42.62	41.40	40.35	39.30
225.0	50.70	46.55	44.12	42.23	40.68	39.02	38.03	37.20	36.70
270.0	52.97	49.10	45.45	43.29	41.57	39.91	38.75	37.92	37.36
315.0	49.38	46.77	44.34	42.73	41.40	40.30	39.13	38.53	38.19
360.0	47.44	45.00	43.34	41.90	40.41	39.41	38.80	38.42	38.69

C/γ(°)	54.0	55.0	56.0	57.0	58.0	59.0	60.0	61.0	62.0
0.0	39.30	40.13	41.18	41.96	42.40	41.52	38.91	35.54	31.72
45.0	39.41	40.13	41.29	41.90	42.90	43.40	42.46	40.13	35.92
90.0	39.19	39.97	41.35	42.62	43.18	42.79	40.63	37.75	33.77
135.0	37.03	37.53	38.64	40.24	41.63	42.90	43.62	42.57	40.46
180.0	38.91	38.97	39.30	40.57	42.01	43.29	44.84	45.61	44.67
225.0	36.64	37.25	38.30	39.85	41.18	42.90	43.34	42.84	40.63
270.0	37.03	37.25	37.92	39.02	41.02	42.35	43.34	43.62	42.23
315.0	38.19	38.80	40.02	41.46	42.68	43.51	43.01	41.18	37.97
360.0	39.30	40.13	41.18	41.96	42.40	41.52	38.91	35.54	31.72

C/γ(°)	63.0	64.0	65.0	66.0	67.0	68.0	69.0	70.0	71.0
0.0	27.23	24.58	22.47	21.53	20.76	20.09	19.37	18.88	18.43
45.0	31.77	28.17	24.63	22.64	21.64	20.70	20.04	19.48	18.82
90.0	29.89	25.35	23.25	21.75	20.92	20.04	19.48	18.82	18.27
135.0	35.59	31.11	27.07	24.30	22.09	21.15	20.37	19.76	19.04
180.0	42.35	38.86	34.49	29.01	25.91	23.75	22.25	21.48	20.59
225.0	36.09	31.55	27.57	24.52	22.25	21.26	20.37	19.76	19.21
270.0	39.41	33.99	29.95	25.85	23.30	21.70	20.81	20.20	19.43
315.0	32.55	28.51	25.46	23.47	22.14	21.09	20.43	19.76	19.10
360.0	27.23	24.58	22.47	21.53	20.76	20.09	19.37	18.88	18.43

C/γ(°)	72.0	73.0	74.0	75.0	76.0	77.0	78.0	79.0	80.0
0.0	17.93	17.44	16.99	16.72	16.38	16.05	15.72	15.33	14.95
45.0	18.38	17.88	17.49	17.05	16.72	16.38	16.05	15.67	15.33
90.0	17.82	17.33	16.94	16.66	16.22	15.94	15.67	15.33	14.89
135.0	18.49	18.05	17.55	17.10	16.72	16.44	16.16	15.83	15.44
180.0	19.98	19.37	18.71	18.27	17.77	17.33	16.94	16.50	16.11
225.0	18.60	18.10	17.71	17.33	16.88	16.55	16.22	15.89	15.44
270.0	18.93	18.43	17.99	17.44	17.05	16.77	16.33	16.00	15.67
315.0	18.60	18.10	17.55	17.16	16.72	16.38	16.11	15.78	15.33
360.0	17.93	17.44	16.99	16.72	16.38	16.05	15.72	15.33	14.95

C/γ(°)	81.0	82.0	83.0	84.0	85.0	86.0	87.0	88.0	89.0
0.0	14.61	14.23	13.89	13.56	13.23	13.01	12.79	12.62	12.62
45.0	14.95	14.50	14.00	13.67	13.28	13.06	12.79	12.57	12.45
90.0	14.56	14.12	13.78	13.45	13.12	12.84	12.62	12.45	12.40
135.0	15.11	14.67	14.23	13.89	13.51	13.23	12.95	12.73	12.57
180.0	15.78	15.33	14.89	14.45	14.00	13.67	13.40	13.12	12.84
225.0	15.11	14.72	14.28	13.89	13.62	13.28	13.01	12.79	12.57
270.0	15.33	15.00	14.50	14.12	13.78	13.40	13.12	12.84	12.57
315.0	14.95	14.50	14.17	13.78	13.45	13.12	12.90	12.68	12.51
360.0	14.61	14.23	13.89	13.56	13.23	13.01	12.79	12.62	12.62

Intensity data(cd)

C/γ(°)	90.0
0.0	12.62
45.0	12.45
90.0	12.40
135.0	12.45
180.0	12.62
225.0	12.45
270.0	12.40
315.0	12.45
360.0	12.62