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: 1-1381-L
Luminaire: 92.70.427.00
Report No: 2023718-B017
Ballast type: AC

Test No: 2023718-C017	Voltage(V): 35.550
LampCAT: CITIZEN CLU028	Current(A): 0.282
Lamp flux(lm): 1223.2	Power (W): 10.251
Number of Lamps: 1	PF: 0.000
Length(mm): 0	Width(mm): 0
Phm Type: C	Height(mm): 0

Photometric Results

Lumens(lm): 1141.13, Efficiency(%): 93.29% , Luminous Efficacy(lm/W): 111.32
Central intensity(cd): 5285.384, Maximum intensity(cd): 5285.384
Angle of maximum intensity: C=0.0 γ=0.0
Beam Angle(50%Imax): [C0/180]Total=18.2
[C90/270]Total=18.2
Field angle(10%Imax): [C0/180]Total=51.2
[C90/270]Total=51.2
Maximum s/h(1/2): C0_180=0.31 C90_270=0.31
Maximum s/h(1/4): C0_180=0.37 C90_270=0.37
Up flux rate of lamp(%): 0.00%
Down flux rate of lamp(%): 93.29%
Up flux rate of LUM(%): - -
Down flux rate of LUM(%): 100.00%
CIE Type : Direct lighting
Output flux ratio in π solid angle : 97.878%

Zonal flux distribution table

γ(°)	Average I(cd)	Zonal F(lm)	Sum F(lm)	Eff Flux(%)	Eff Sum(%)
0.0	5285.383	0.000	0	0.00%	0.00%
1.0	5235.772	5.034	5.034	0.41%	0.44%
2.0	5080.436	14.807	19.841	1.21%	1.74%
3.0	4845.391	23.739	43.58	1.94%	3.82%
4.0	4539.839	31.415	74.996	2.57%	6.57%
5.0	4178.104	37.504	112.5	3.07%	9.86%
6.0	3810.556	41.983	154.482	3.43%	13.54%
7.0	3409.450	44.814	199.297	3.66%	17.46%
8.0	3047.022	46.208	245.504	3.78%	21.51%
9.0	2676.914	46.389	291.894	3.79%	25.58%
10.0	2388.660	45.842	337.735	3.75%	29.60%
11.0	2142.959	45.280	383.016	3.70%	33.56%
12.0	1927.149	44.492	427.508	3.64%	37.46%
13.0	1733.550	43.443	470.951	3.55%	41.27%
14.0	1574.824	42.347	513.298	3.46%	44.98%
15.0	1408.348	40.954	554.252	3.35%	48.57%
16.0	1279.893	39.390	593.642	3.22%	52.02%
17.0	1161.235	38.015	631.657	3.11%	55.35%
18.0	1085.249	37.040	668.697	3.03%	58.60%
19.0	996.531	36.219	704.916	2.96%	61.77%
20.0	909.619	34.888	739.804	2.85%	64.83%
21.0	828.733	33.380	773.183	2.73%	67.76%
22.0	752.920	31.784	804.967	2.60%	70.54%
23.0	681.742	30.103	835.071	2.46%	73.18%
24.0	619.912	28.459	863.529	2.33%	75.67%
25.0	560.497	26.840	890.369	2.19%	78.02%
26.0	508.181	25.226	915.596	2.06%	80.24%
27.0	458.951	23.661	939.257	1.93%	82.31%
28.0	406.517	21.912	961.168	1.79%	84.23%
29.0	358.089	20.004	981.173	1.64%	85.98%
30.0	310.368	18.048	999.221	1.48%	87.56%
31.0	270.209	16.157	1015.377	1.32%	88.98%
32.0	232.727	14.409	1029.786	1.18%	90.24%
33.0	187.275	12.373	1042.159	1.01%	91.33%
34.0	134.641	9.742	1051.902	0.80%	92.18%
35.0	101.622	7.337	1059.239	0.60%	92.82%
36.0	78.997	5.751	1064.99	0.47%	93.33%
37.0	65.712	4.720	1069.709	0.39%	93.74%

Zonal flux distribution table

γ(°)	Average I(cd)	Zonal F(lm)	Sum F(lm)	Eff Flux(%)	Eff Sum(%)
38.0	56.647	4.084	1073.794	0.33%	94.10%
39.0	50.123	3.644	1077.438	0.30%	94.42%
40.0	44.892	3.314	1080.752	0.27%	94.71%
41.0	40.367	3.036	1083.788	0.25%	94.97%
42.0	36.146	2.780	1086.568	0.23%	95.22%
43.0	32.901	2.558	1089.125	0.21%	95.44%
44.0	30.064	2.376	1091.502	0.19%	95.65%
45.0	27.566	2.215	1093.717	0.18%	95.84%
46.0	25.255	2.066	1095.782	0.17%	96.03%
47.0	23.366	1.934	1097.716	0.16%	96.20%
48.0	21.733	1.823	1099.539	0.15%	96.35%
49.0	20.204	1.722	1101.261	0.14%	96.51%
50.0	19.076	1.638	1102.899	0.13%	96.65%
51.0	18.025	1.570	1104.469	0.13%	96.79%
52.0	17.180	1.511	1105.98	0.12%	96.92%
53.0	16.399	1.461	1107.44	0.12%	97.05%
54.0	15.838	1.421	1108.861	0.12%	97.17%
55.0	15.291	1.390	1110.251	0.11%	97.29%
56.0	14.862	1.363	1111.613	0.11%	97.41%
57.0	14.551	1.345	1112.958	0.11%	97.53%
58.0	14.295	1.334	1114.292	0.11%	97.65%
59.0	14.004	1.323	1115.615	0.11%	97.76%
60.0	13.659	1.307	1116.922	0.11%	97.88%
61.0	13.271	1.285	1118.207	0.11%	97.99%
62.0	12.773	1.255	1119.462	0.10%	98.10%
63.0	12.157	1.212	1120.674	0.10%	98.21%
64.0	11.541	1.163	1121.837	0.10%	98.31%
65.0	10.870	1.109	1122.946	0.09%	98.41%
66.0	10.254	1.054	1124	0.09%	98.50%
67.0	9.715	1.004	1125.004	0.08%	98.59%
68.0	9.251	0.961	1125.965	0.08%	98.67%
69.0	8.808	0.921	1126.886	0.08%	98.75%
70.0	8.462	0.887	1127.773	0.07%	98.83%
71.0	8.137	0.858	1128.631	0.07%	98.90%
72.0	7.860	0.832	1129.463	0.07%	98.98%
73.0	7.597	0.808	1130.272	0.07%	99.05%
74.0	7.376	0.787	1131.059	0.06%	99.12%
75.0	7.127	0.766	1131.825	0.06%	99.18%

Zonal flux distribution table

γ(°)	Average I(cd)	Zonal F(lm)	Sum F(lm)	Eff Flux(%)	Eff Sum(%)
76.0	6.905	0.745	1132.57	0.06%	99.25%
77.0	6.670	0.724	1133.294	0.06%	99.31%
78.0	6.469	0.703	1133.997	0.06%	99.37%
79.0	6.255	0.684	1134.681	0.06%	99.43%
80.0	6.075	0.665	1135.345	0.05%	99.49%
81.0	5.888	0.647	1135.992	0.05%	99.55%
82.0	5.708	0.629	1136.621	0.05%	99.60%
83.0	5.563	0.613	1137.234	0.05%	99.66%
84.0	5.404	0.597	1137.831	0.05%	99.71%
85.0	5.245	0.581	1138.413	0.05%	99.76%
86.0	5.113	0.566	1138.979	0.05%	99.81%
87.0	5.003	0.554	1139.532	0.05%	99.86%
88.0	4.920	0.544	1140.076	0.04%	99.91%
89.0	4.816	0.534	1140.61	0.04%	99.95%
90.0	4.747	0.524	1141.134	0.04%	100.00%

Zonal flux distribution table

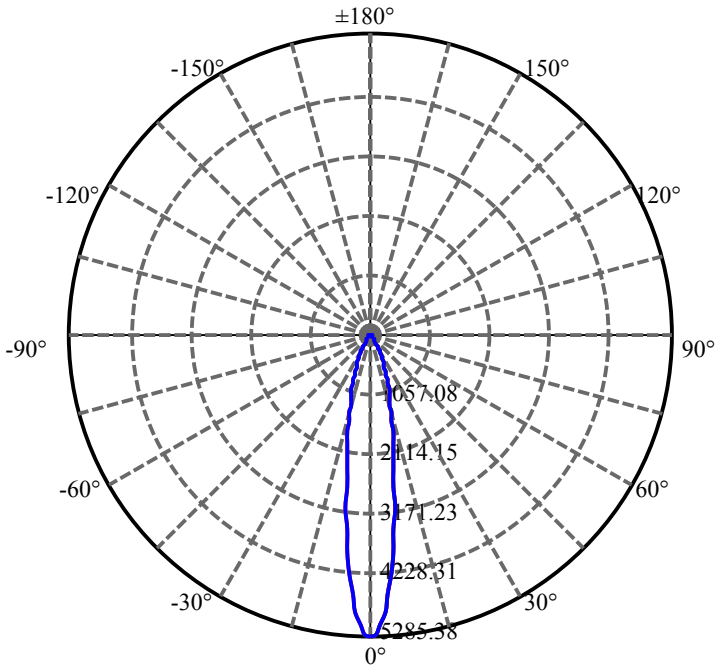
ZONAL LUMEN SUMMARY

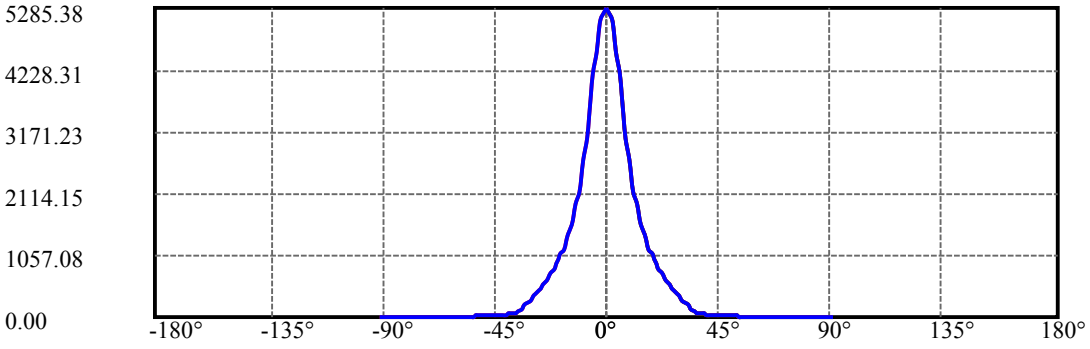
Zone	Lumens	%Lamp	%Fixt
0-30	999.22	81.69%	87.56%
0-40	1080.75	88.35%	94.71%
0-60	1116.92	91.31%	97.88%
0-90	1140.61	93.25%	99.95%
0-120	1140.61	93.25%	99.95%
0-180	1141.13	93.29%	100.00%
60-90	23.69	1.94%	2.08%
90-120	0.00	0.00%	0.00%
90-130	0.00	0.00%	0.00%
90-150	0.00	0.00%	0.00%
90-180	0.00	0.00%	0.00%
0-25.89	912.91	74.63%	80.00%

ZONAL LUMEN SUMMARY

0-10	337.74
10-20	402.07
20-30	259.42
30-40	81.53
40-50	22.15
50-60	14.02
60-70	10.85
70-80	7.57
80-90	5.26
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:25.6 Right:25.6
:C90/270Left:25.6 Right:25.6

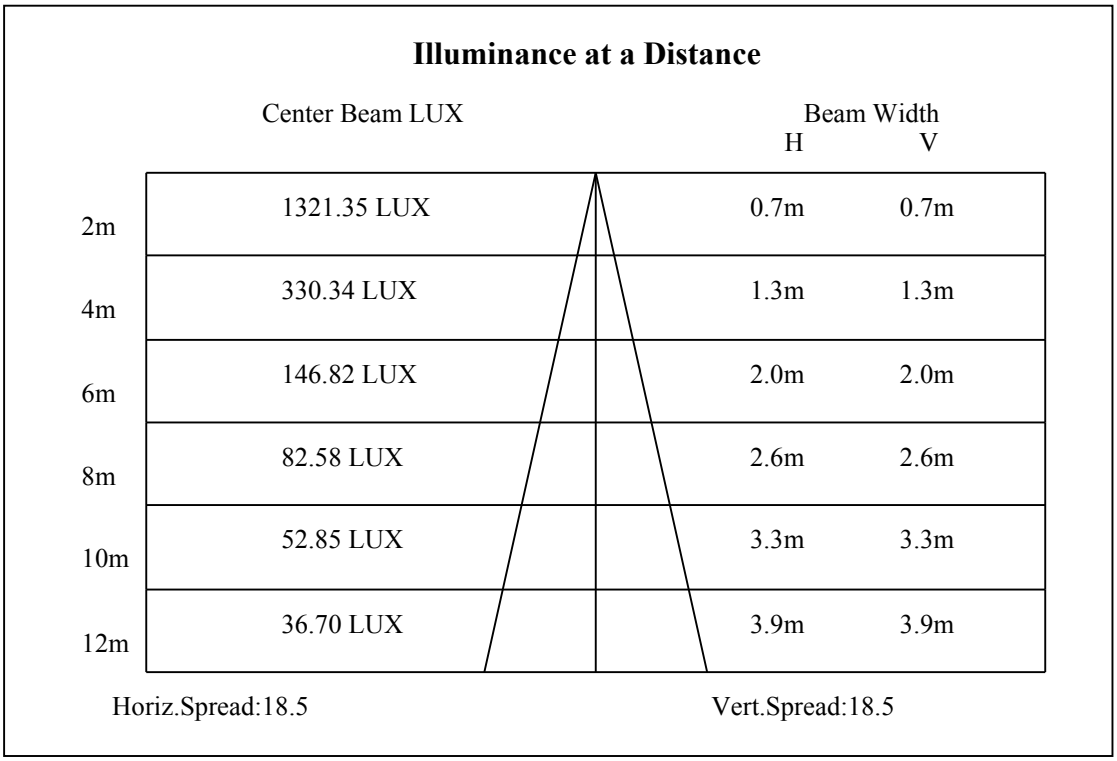
Beam Angle(50%Imax):C0/180Left:9.1 Right:9.1
:C90/270Left:9.1 Right:9.1

Equipment: GMS1980
Temperature(°C): 25.0

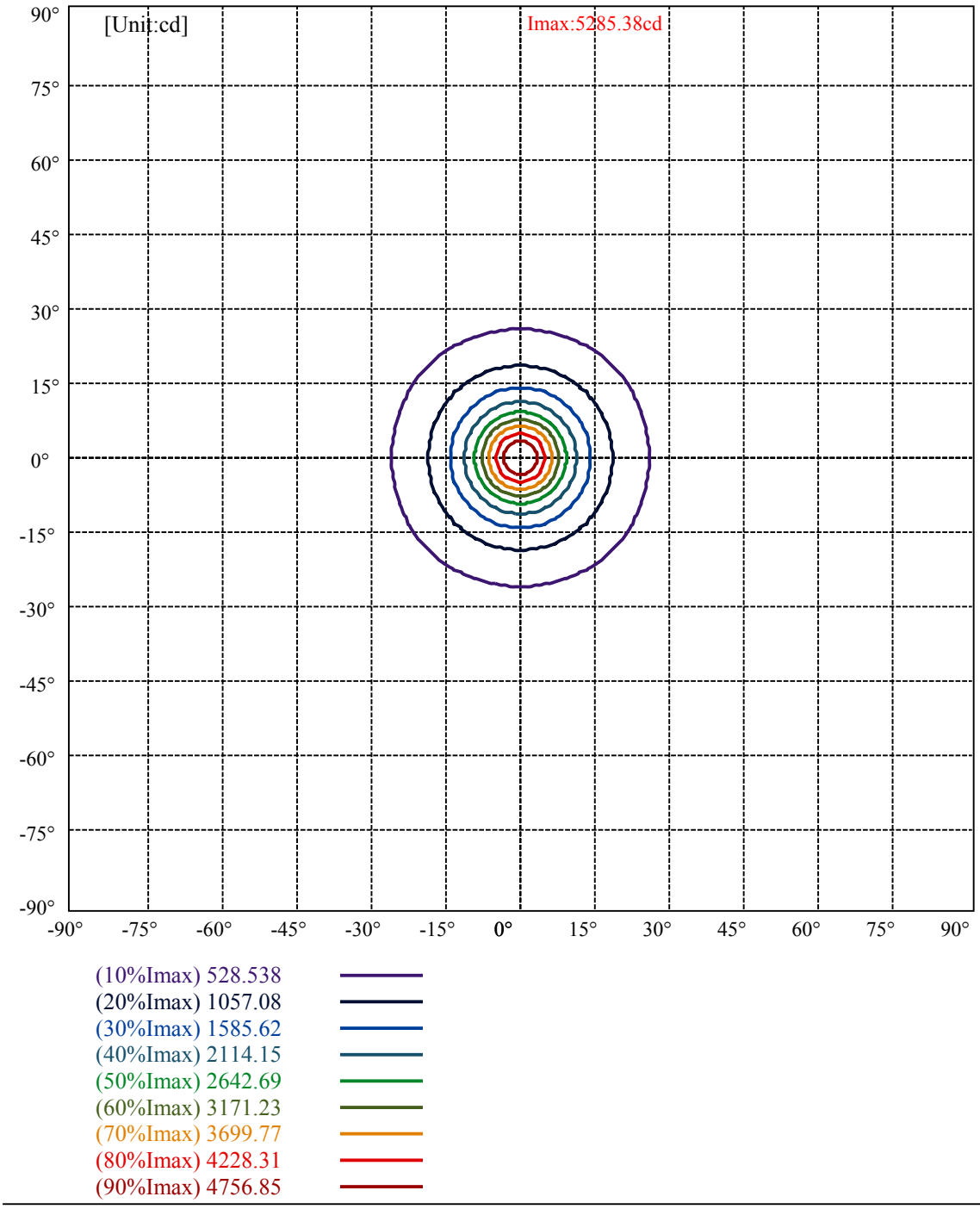
Date: 2023/7/18
Humidity(%): 60.0%

Operator: NT07
Distance(m): 7.44

Lux distance Curve



ISO-Intensity(V-H)

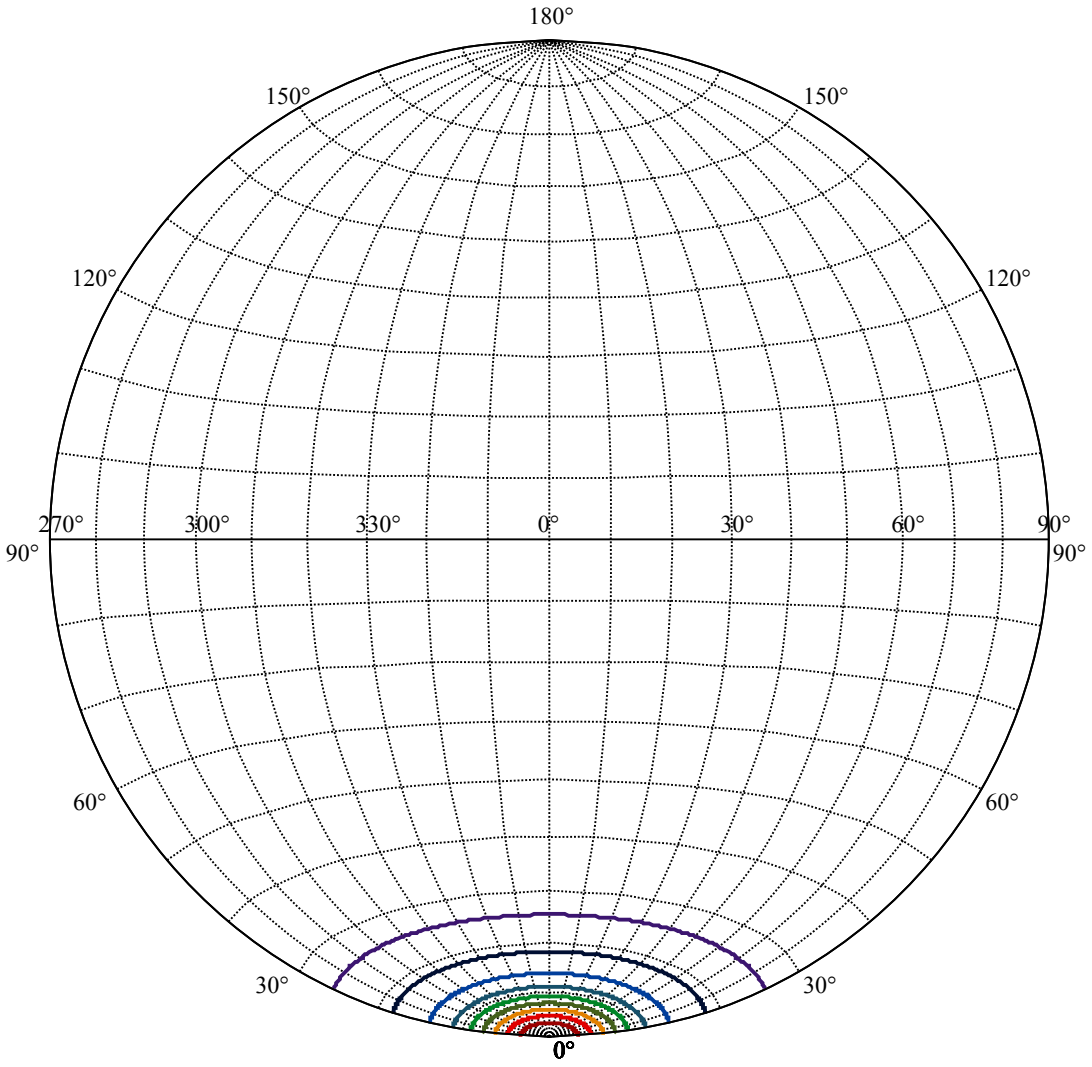


Equipment: GMS1980
Temperature(°C): 25.0

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

Operator: NT07
Distance(m): 7.44

ISO candela diagram on circular web



House [Unit:cd] Road

Imax:5285.38

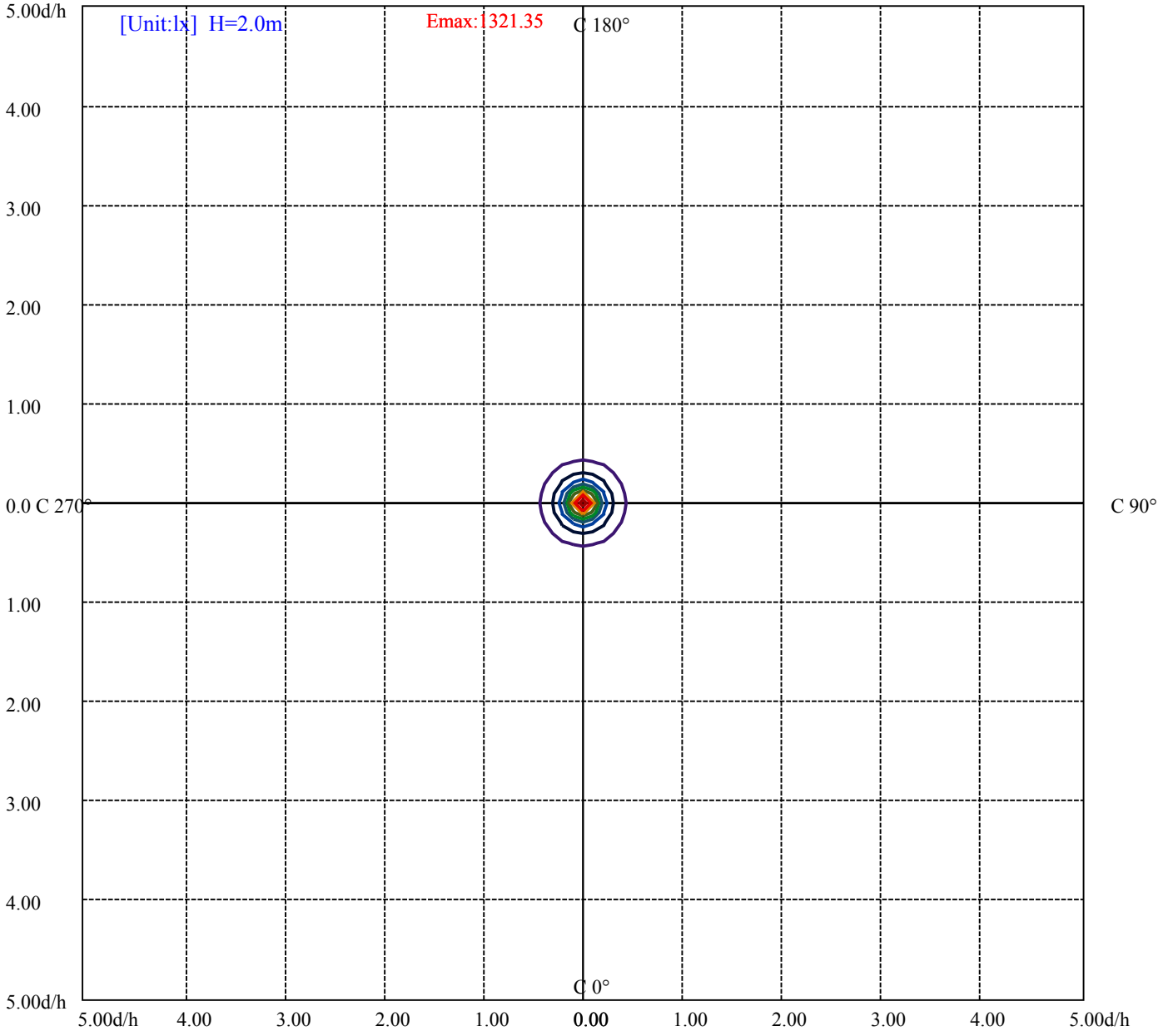
(10%Imax) 528.538
(20%Imax) 1057.08
(30%Imax) 1585.62
(40%Imax) 2114.15
(50%Imax) 2642.69
(60%Imax) 3171.23
(70%Imax) 3699.77
(80%Imax) 4228.31
(90%Imax) 4756.85

Equipment: GMS1980
Temperature(°C): 25.0

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

Operator: NT07
Distance(m): 7.44

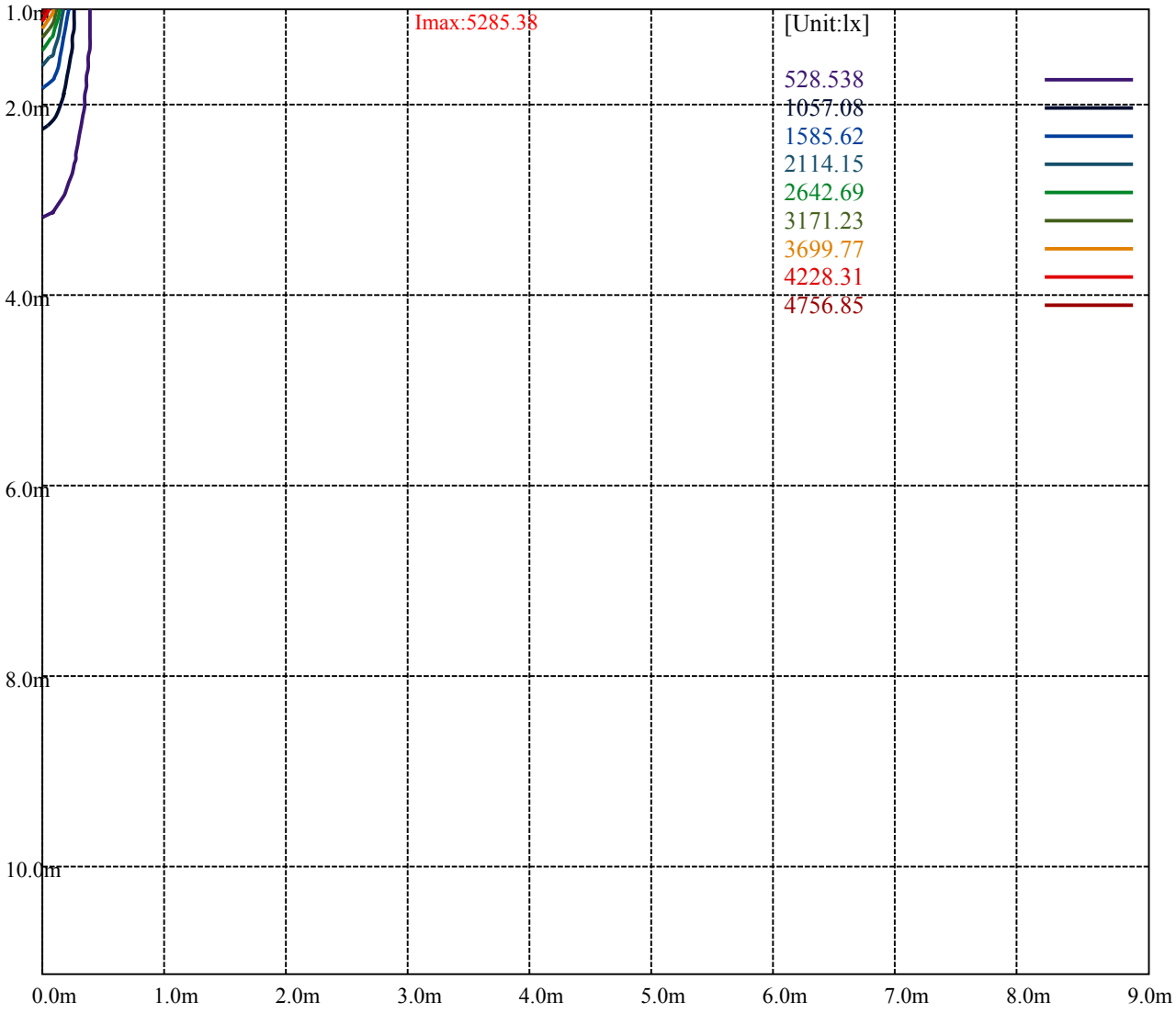
ISO illuminance diagram



(10%Emax) 132.1345
(20%Emax) 264.27
(30%Emax) 396.4025
(40%Emax) 528.5375
(50%Emax) 660.6725
(60%Emax) 792.8075
(70%Emax) 924.94
(80%Emax) 1057.075
(90%Emax) 1189.21

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

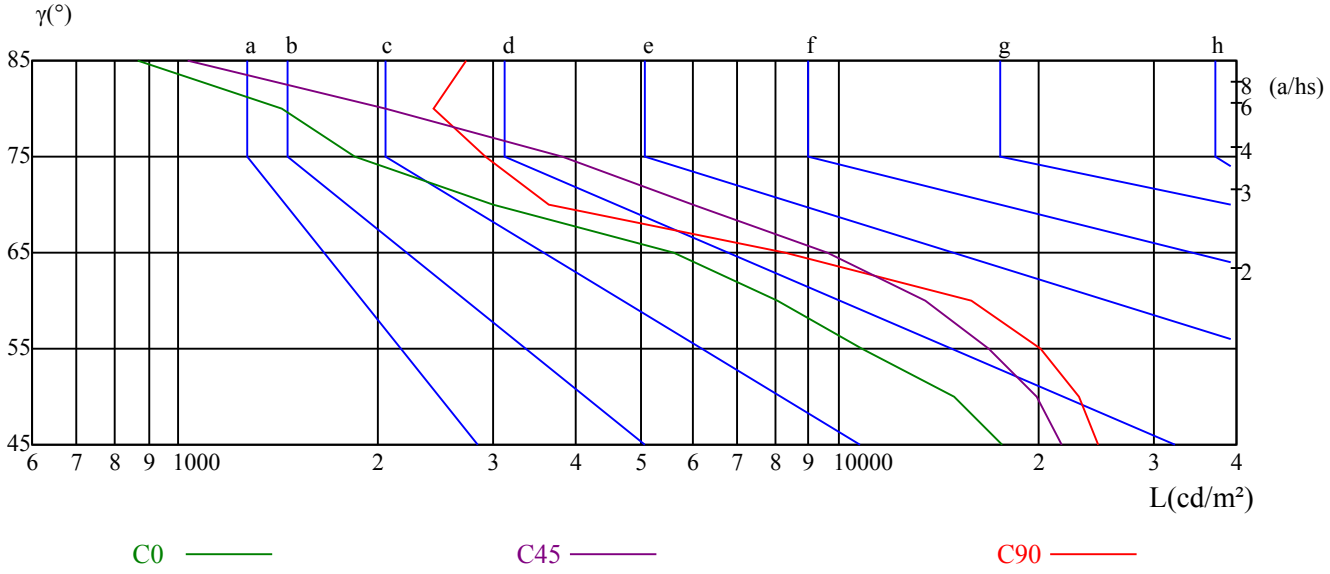
γ	45	50	55	60	65	70	75	80	85
C0	17707	14902	10843	8081	5637	2993	1851	1437	868
C45	21736	19918	16903	13532	9602	6004	3809	2064	1031
C90	24698	23118	20255	15854	8293	3645	2908	2436	2724

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

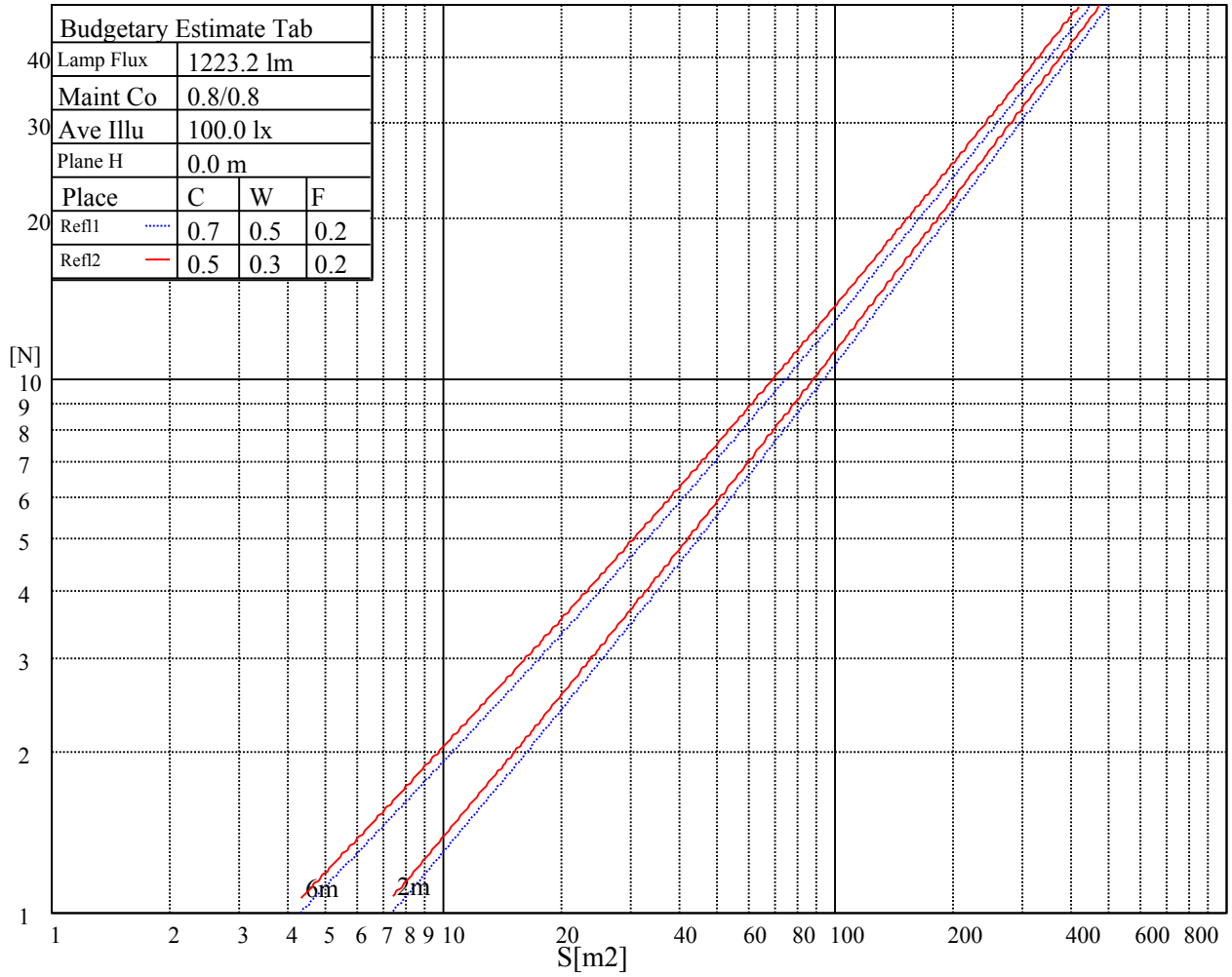
Luminance Limitting Curve



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

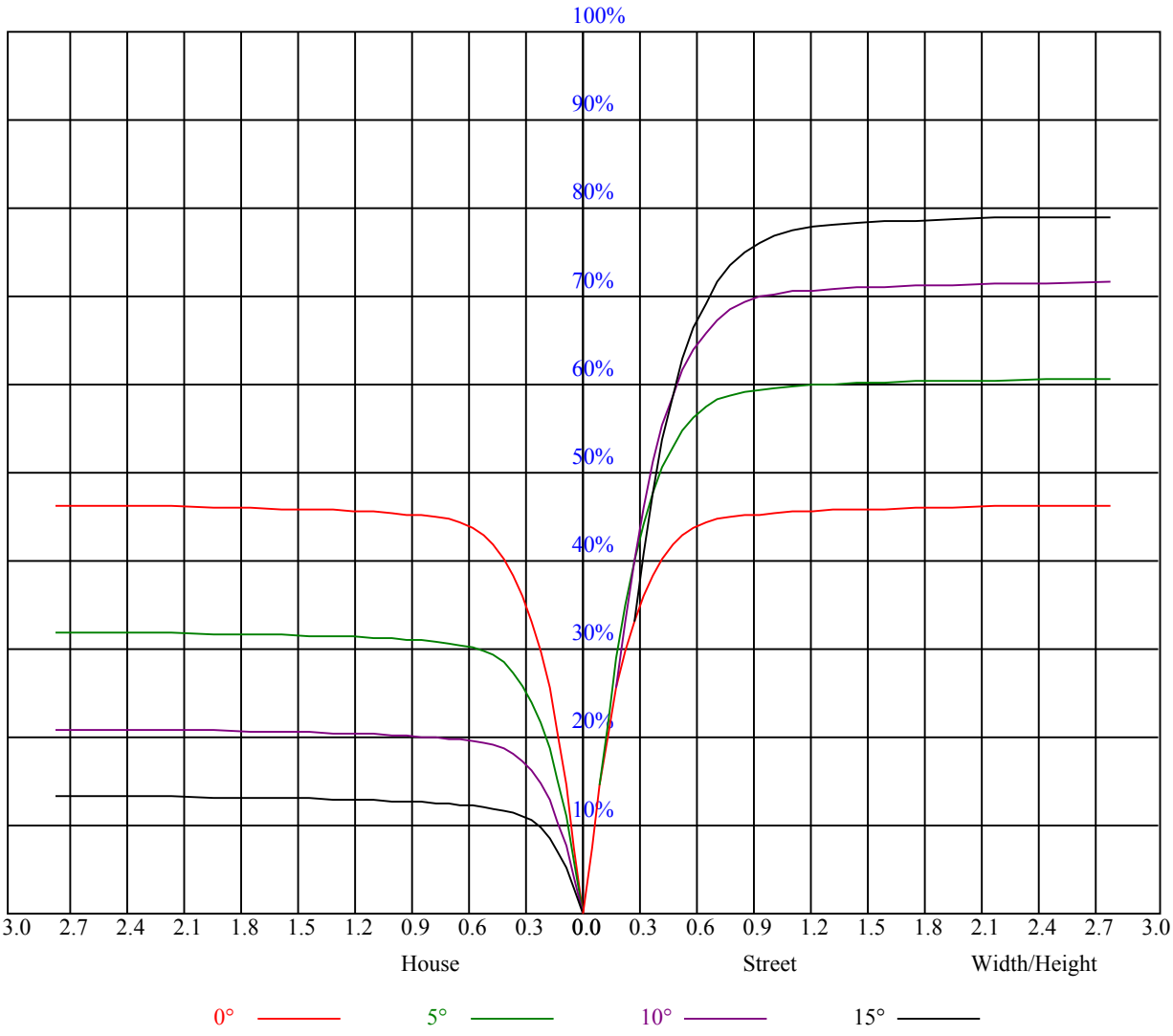


Equipment: GMS1980 Date: 2023/7/18 Operator: NT07
Temperature(°C): 25.0 Humidity(%): 60.0% Distance(m): 7.44

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	1.11	1.11	1.11	1.08	1.08	1.08	1.04	1.04	1.04	0.99	0.99	0.99	0.95	0.95	0.95	0.93
1	1.04	1.02	1.00	1.02	1.00	0.99	0.98	0.97	0.96	0.95	0.94	0.93	0.92	0.91	0.90	0.89
2	0.98	0.95	0.92	0.97	0.94	0.91	0.94	0.91	0.89	0.91	0.89	0.88	0.89	0.87	0.86	0.84
3	0.93	0.89	0.86	0.92	0.89	0.86	0.90	0.87	0.84	0.88	0.85	0.83	0.86	0.83	0.82	0.80
4	0.89	0.85	0.81	0.88	0.84	0.81	0.86	0.83	0.80	0.84	0.81	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	0.77	0.73	0.79	0.76	0.73	0.78	0.75	0.73	0.77	0.74	0.72	0.71
7	0.78	0.74	0.71	0.78	0.73	0.70	0.77	0.73	0.70	0.76	0.72	0.70	0.75	0.72	0.69	0.68
8	0.75	0.71	0.68	0.75	0.71	0.68	0.74	0.70	0.67	0.73	0.70	0.67	0.72	0.69	0.67	0.66
9	0.73	0.68	0.65	0.72	0.68	0.65	0.71	0.68	0.65	0.71	0.67	0.65	0.70	0.67	0.65	0.64
10	0.70	0.66	0.63	0.70	0.66	0.63	0.69	0.65	0.63	0.69	0.65	0.63	0.68	0.65	0.63	0.62

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	5262.96	5115.17	4838.96	4550.01	4210.69	3760.67	3395.89	3041.62	2722.79
45.0	5320.53	5248.57	5094.69	4789.69	4484.14	4140.95	3771.74	3307.88	2966.34
90.0	5226.99	5060.37	4739.87	4419.93	4070.09	3698.67	3242.00	2894.38	2506.91
135.0	5331.05	5233.07	5055.39	4812.94	4494.66	4055.70	3675.98	3302.34	2945.31
180.0	5262.96	5318.32	5286.21	5114.06	4894.86	4528.98	4191.32	3819.90	3436.30
225.0	5320.53	5285.11	5150.60	4951.32	4590.97	4261.06	3892.41	3416.92	3050.48
270.0	5226.99	5324.96	5324.96	5180.49	4983.43	4712.20	4401.66	3956.07	3582.43
315.0	5331.05	5300.61	5152.81	4944.68	4589.87	4266.60	3913.44	3536.49	3165.62
360.0	5262.96	5115.17	4838.96	4550.01	4210.69	3760.67	3395.89	3041.62	2722.79

C/γ(°)	9.0	10.0	11.0	12.0	13.0	14.0	15.0	16.0	17.0
0.0	2376.27	2142.13	1940.09	1766.83	1577.52	1444.12	1224.37	1094.56	1094.56
45.0	2652.49	2379.04	2089.54	1895.81	1725.32	1539.88	1409.80	1264.22	1162.92
90.0	2248.96	2029.76	1843.22	1644.50	1502.79	1379.36	1093.18	1093.18	1050.33
135.0	2560.05	2294.35	2071.83	1883.07	1679.93	1534.35	1408.69	1264.77	1165.14
180.0	2981.84	2654.70	2367.97	2122.76	1877.54	1712.03	1563.13	1394.86	1291.90
225.0	2715.59	2359.12	2128.29	1930.68	1764.62	1580.29	1450.76	1337.84	1083.55
270.0	3130.74	2796.41	2493.62	2174.79	1968.32	1793.40	1635.09	1459.62	1345.04
315.0	2749.36	2453.77	2209.11	1998.76	1772.37	1615.16	1481.76	1330.09	1096.44
360.0	2376.27	2142.13	1940.09	1766.83	1577.52	1444.12	1224.37	1094.56	1094.56

C/γ(°)	18.0	19.0	20.0	21.0	22.0	23.0	24.0	25.0	26.0
0.0	987.40	911.84	836.95	747.44	679.52	616.97	562.12	504.71	459.21
45.0	1072.70	990.22	891.69	818.62	748.33	680.79	603.30	552.37	505.88
90.0	969.74	875.36	801.80	733.44	652.01	591.90	541.80	483.29	435.47
135.0	1051.66	969.19	891.69	798.70	728.95	663.63	602.75	540.75	490.93
180.0	1186.17	1065.50	983.58	909.40	813.09	739.47	680.24	618.80	550.71
225.0	1083.55	1017.73	918.32	842.76	772.63	691.37	627.60	575.73	528.68
270.0	1234.33	1131.93	1023.99	944.28	866.78	772.68	707.92	640.39	572.85
315.0	1096.44	1010.48	928.94	835.23	762.05	697.12	633.58	567.93	521.71
360.0	987.40	911.84	836.95	747.44	679.52	616.97	562.12	504.71	459.21

C/γ(°)	27.0	28.0	29.0	30.0	31.0	32.0	33.0	34.0	35.0
0.0	410.39	363.51	307.71	264.92	223.68	173.37	135.84	104.01	75.61
45.0	457.17	397.38	353.10	309.92	287.78	287.78	158.59	124.16	94.71
90.0	389.14	331.96	288.00	245.33	193.79	156.76	122.94	95.76	73.40
135.0	441.11	391.85	347.57	292.77	281.14	227.50	157.09	124.55	90.95
180.0	503.66	456.61	410.11	351.44	305.50	283.91	283.91	164.34	120.17
225.0	467.63	418.14	370.65	323.10	265.42	219.31	178.07	133.13	102.90
270.0	526.91	466.02	420.08	374.13	327.64	281.69	281.69	187.15	149.68
315.0	475.60	426.67	367.49	321.33	276.71	231.49	180.07	144.03	105.56
360.0	410.39	363.51	307.71	264.92	223.68	173.37	135.84	104.01	75.61

C/γ(°)	36.0	37.0	38.0	39.0	40.0	41.0	42.0	43.0	44.0
0.0	62.88	55.85	49.15	44.67	40.57	37.09	33.27	30.67	28.40
45.0	73.12	58.56	52.36	47.05	42.57	37.81	34.54	31.77	29.39
90.0	63.99	57.68	52.03	46.05	41.96	37.59	34.54	31.94	29.01
135.0	73.68	63.32	55.13	49.38	44.45	40.24	35.76	32.66	30.06
180.0	92.44	73.01	61.61	53.36	47.71	42.84	38.47	33.99	31.05
225.0	75.95	63.60	55.96	48.49	43.12	38.53	34.76	31.50	28.12
270.0	108.27	86.74	70.08	60.72	52.75	47.44	41.24	37.31	33.77
315.0	81.65	66.92	56.85	51.26	46.00	41.40	36.59	33.38	30.72
360.0	62.88	55.85	49.15	44.67	40.57	37.09	33.27	30.67	28.40

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	26.29	24.08	22.53	20.98	19.65	18.65	17.49	16.77	16.22
45.0	26.79	24.85	22.75	21.20	19.65	18.65	17.77	16.99	16.22
90.0	26.85	24.96	23.30	21.70	20.59	19.48	18.65	17.88	17.05
135.0	27.79	25.08	23.30	21.42	20.15	18.99	17.77	16.99	16.33
180.0	28.51	25.79	23.97	22.25	20.48	19.21	18.27	17.16	16.38
225.0	26.02	24.02	21.86	20.48	19.15	18.16	17.05	16.33	15.55
270.0	30.00	27.57	25.41	23.58	21.53	20.09	18.99	18.05	16.88
315.0	28.29	25.68	23.80	22.25	20.43	19.37	18.21	17.27	16.55
360.0	26.29	24.08	22.53	20.98	19.65	18.65	17.49	16.77	16.22

C/γ(°)	54.0	55.0	56.0	57.0	58.0	59.0	60.0	61.0	62.0
0.0	15.61	15.17	14.89	14.61	14.28	14.00	13.73	13.28	12.40
45.0	15.72	15.17	14.78	14.50	14.39	14.12	13.84	13.45	12.90
90.0	16.50	15.83	15.50	15.11	14.61	14.34	13.73	13.12	12.45
135.0	15.72	15.17	14.72	14.50	14.34	13.84	13.51	13.12	12.45
180.0	15.83	15.22	14.72	14.34	14.12	14.00	13.67	13.40	13.23
225.0	15.17	14.72	14.28	14.06	13.89	13.67	13.28	13.01	12.68
270.0	16.11	15.61	15.00	14.56	14.17	13.89	13.67	13.34	12.95
315.0	16.05	15.44	15.00	14.72	14.56	14.17	13.84	13.45	13.12
360.0	15.61	15.17	14.89	14.61	14.28	14.00	13.73	13.28	12.40

C/γ(°)	63.0	64.0	65.0	66.0	67.0	68.0	69.0	70.0	71.0
0.0	11.85	11.29	10.46	9.96	9.52	8.91	8.58	8.30	7.97
45.0	12.07	11.46	10.85	10.07	9.52	9.19	8.75	8.30	8.03
90.0	11.85	11.24	10.46	9.91	9.47	9.02	8.58	8.30	8.03
135.0	11.85	11.24	10.63	10.02	9.58	9.08	8.69	8.36	7.97
180.0	12.62	12.01	11.29	10.74	10.13	9.69	9.13	8.75	8.41
225.0	12.12	11.40	10.90	10.35	9.74	9.30	8.80	8.47	8.14
270.0	12.62	12.01	11.40	10.74	10.13	9.63	9.13	8.75	8.41
315.0	12.29	11.68	10.96	10.24	9.63	9.19	8.80	8.47	8.14
360.0	11.85	11.29	10.46	9.96	9.52	8.91	8.58	8.30	7.97

C/γ(°)	72.0	73.0	74.0	75.0	76.0	77.0	78.0	79.0	80.0
0.0	7.69	7.47	7.25	6.97	6.75	6.53	6.37	6.14	5.98
45.0	7.80	7.53	7.31	7.09	6.86	6.64	6.42	6.25	6.03
90.0	7.69	7.47	7.20	6.97	6.75	6.48	6.31	6.09	5.98
135.0	7.69	7.47	7.25	6.97	6.75	6.59	6.37	6.14	5.92
180.0	8.08	7.80	7.58	7.31	7.09	6.86	6.64	6.42	6.20
225.0	7.92	7.58	7.42	7.20	6.97	6.70	6.48	6.31	6.14
270.0	8.14	7.80	7.58	7.36	7.09	6.86	6.64	6.42	6.25
315.0	7.86	7.64	7.42	7.14	6.97	6.70	6.53	6.25	6.09
360.0	7.69	7.47	7.25	6.97	6.75	6.53	6.37	6.14	5.98

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

Intensity data(cd)

C/γ(°)	90.0
0.0	4.82
45.0	4.76
90.0	4.82
135.0	4.65
180.0	4.76
225.0	4.76
270.0	4.76
315.0	4.65
360.0	4.82