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NATA

Client:
LumCAT: 2-2644-L
Luminaire: 92.70.412.00
Report No: 20231013-B005
Ballast type: AC

Test No: 20231013-C005	Voltage(V): 34.270
LampCAT: LUMINUS CXM-14-AC40	Current(A): 0.530
Lamp flux(lm): 2320.0	Power (W): 18.163
Number of Lamps: 1	PF: 0.000
Length(mm): 0	Width(mm): 0
Phm Type: C	Height(mm): 0

Photometric Results

Lumens(lm): 2108.09, Efficiency(%): 90.87% , Luminous Efficacy(lm/W): 116.07
Central intensity(cd): 7203.164, Maximum intensity(cd): 7203.164
Angle of maximum intensity: C=0.0 γ=0.0
Beam Angle(50%Imax): [C0/180]Total=25.6
[C90/270]Total=25.6
Field angle(10%Imax): [C0/180]Total=56.4
[C90/270]Total=56.4
Maximum s/h(1/2): C0_180=0.43 C90_270=0.43
Maximum s/h(1/4): C0_180=0.47 C90_270=0.47
Up flux rate of lamp(%): 0.00%
Down flux rate of lamp(%): 90.87%
Up flux rate of LUM(%): - -
Down flux rate of LUM(%): 100.00%
CIE Type : Direct lighting
Output flux ratio in π solid angle : 98.065%

Zonal flux distribution table

γ(°)	Average I(cd)	Zonal F(lm)	Sum F(lm)	Eff Flux(%)	Eff Sum(%)
0.0	7203.164	0.000	0	0.00%	0.00%
1.0	7167.876	6.876	6.876	0.30%	0.33%
2.0	7054.055	20.413	27.289	0.88%	1.29%
3.0	6880.729	33.327	60.616	1.44%	2.88%
4.0	6652.811	45.301	105.917	1.95%	5.02%
5.0	6392.165	56.119	162.036	2.42%	7.69%
6.0	6085.921	65.576	227.612	2.83%	10.80%
7.0	5753.246	73.486	301.097	3.17%	14.28%
8.0	5405.071	79.858	380.955	3.44%	18.07%
9.0	5024.723	84.528	465.483	3.64%	22.08%
10.0	4631.159	87.382	552.865	3.77%	26.23%
11.0	4246.105	88.702	641.567	3.82%	30.43%
12.0	3871.292	88.735	730.302	3.82%	34.64%
13.0	3517.099	87.682	817.984	3.78%	38.80%
14.0	3196.255	85.930	903.914	3.70%	42.88%
15.0	2919.626	83.962	987.876	3.62%	46.86%
16.0	2646.456	81.559	1069.434	3.52%	50.73%
17.0	2413.417	78.796	1148.23	3.40%	54.47%
18.0	2193.594	75.960	1224.19	3.27%	58.07%
19.0	1997.435	72.915	1297.105	3.14%	61.53%
20.0	1808.679	69.662	1366.768	3.00%	64.83%
21.0	1636.114	66.147	1432.915	2.85%	67.97%
22.0	1455.973	62.137	1495.051	2.68%	70.92%
23.0	1275.838	57.321	1552.372	2.47%	73.64%
24.0	1180.429	53.703	1606.075	2.31%	76.19%
25.0	1083.152	51.469	1657.544	2.22%	78.63%
26.0	968.197	48.422	1705.966	2.09%	80.92%
27.0	850.162	44.487	1750.453	1.92%	83.03%
28.0	742.486	40.322	1790.775	1.74%	84.95%
29.0	641.403	36.206	1826.982	1.56%	86.67%
30.0	549.025	32.141	1859.123	1.39%	88.19%
31.0	460.798	28.102	1887.225	1.21%	89.52%
32.0	391.142	24.407	1911.632	1.05%	90.68%
33.0	323.203	21.045	1932.677	0.91%	91.68%
34.0	265.711	17.822	1950.499	0.77%	92.52%
35.0	237.031	15.613	1966.112	0.67%	93.26%
36.0	191.171	13.634	1979.746	0.59%	93.91%
37.0	140.280	10.810	1990.556	0.47%	94.42%

Zonal flux distribution table

γ(°)	Average I(cd)	Zonal F(lm)	Sum F(lm)	Eff Flux(%)	Eff Sum(%)
38.0	113.593	8.474	1999.03	0.37%	94.83%
39.0	92.959	7.050	2006.081	0.30%	95.16%
40.0	77.779	5.955	2012.035	0.26%	95.44%
41.0	65.663	5.108	2017.143	0.22%	95.69%
42.0	56.993	4.456	2021.599	0.19%	95.90%
43.0	50.399	3.978	2025.578	0.17%	96.09%
44.0	44.968	3.599	2029.177	0.16%	96.26%
45.0	40.630	3.290	2032.467	0.14%	96.41%
46.0	37.288	3.047	2035.514	0.13%	96.56%
47.0	34.347	2.849	2038.363	0.12%	96.69%
48.0	32.043	2.684	2041.047	0.12%	96.82%
49.0	29.932	2.545	2043.592	0.11%	96.94%
50.0	28.237	2.425	2046.017	0.10%	97.06%
51.0	26.881	2.332	2048.349	0.10%	97.17%
52.0	25.781	2.260	2050.609	0.10%	97.27%
53.0	24.895	2.204	2052.813	0.10%	97.38%
54.0	24.183	2.163	2054.976	0.09%	97.48%
55.0	23.560	2.131	2057.108	0.09%	97.58%
56.0	22.958	2.102	2059.21	0.09%	97.68%
57.0	22.384	2.073	2061.283	0.09%	97.78%
58.0	21.789	2.043	2063.325	0.09%	97.88%
59.0	21.180	2.009	2065.334	0.09%	97.97%
60.0	20.467	1.968	2067.302	0.08%	98.06%
61.0	19.713	1.917	2069.219	0.08%	98.16%
62.0	19.055	1.868	2071.087	0.08%	98.24%
63.0	18.384	1.821	2072.908	0.08%	98.33%
64.0	17.769	1.774	2074.682	0.08%	98.42%
65.0	17.215	1.731	2076.413	0.07%	98.50%
66.0	16.668	1.691	2078.104	0.07%	98.58%
67.0	16.115	1.648	2079.752	0.07%	98.66%
68.0	15.520	1.603	2081.355	0.07%	98.73%
69.0	14.980	1.556	2082.911	0.07%	98.81%
70.0	14.433	1.511	2084.421	0.07%	98.88%
71.0	13.908	1.465	2085.886	0.06%	98.95%
72.0	13.409	1.420	2087.307	0.06%	99.01%
73.0	12.967	1.379	2088.686	0.06%	99.08%
74.0	12.593	1.344	2090.03	0.06%	99.14%
75.0	12.261	1.313	2091.343	0.06%	99.21%

Zonal flux distribution table

γ(°)	Average I(cd)	Zonal F(lm)	Sum F(lm)	Eff Flux(%)	Eff Sum(%)
76.0	11.956	1.286	2092.628	0.06%	99.27%
77.0	11.680	1.260	2093.889	0.05%	99.33%
78.0	11.396	1.235	2095.124	0.05%	99.38%
79.0	11.133	1.210	2096.334	0.05%	99.44%
80.0	10.877	1.187	2097.521	0.05%	99.50%
81.0	10.628	1.163	2098.684	0.05%	99.55%
82.0	10.379	1.139	2099.823	0.05%	99.61%
83.0	10.130	1.115	2100.938	0.05%	99.66%
84.0	9.915	1.092	2102.03	0.05%	99.71%
85.0	9.680	1.069	2103.099	0.05%	99.76%
86.0	9.389	1.042	2104.142	0.04%	99.81%
87.0	9.161	1.015	2105.157	0.04%	99.86%
88.0	8.974	0.993	2106.15	0.04%	99.91%
89.0	8.857	0.977	2107.128	0.04%	99.95%
90.0	8.774	0.967	2108.094	0.04%	100.00%

Zonal flux distribution table

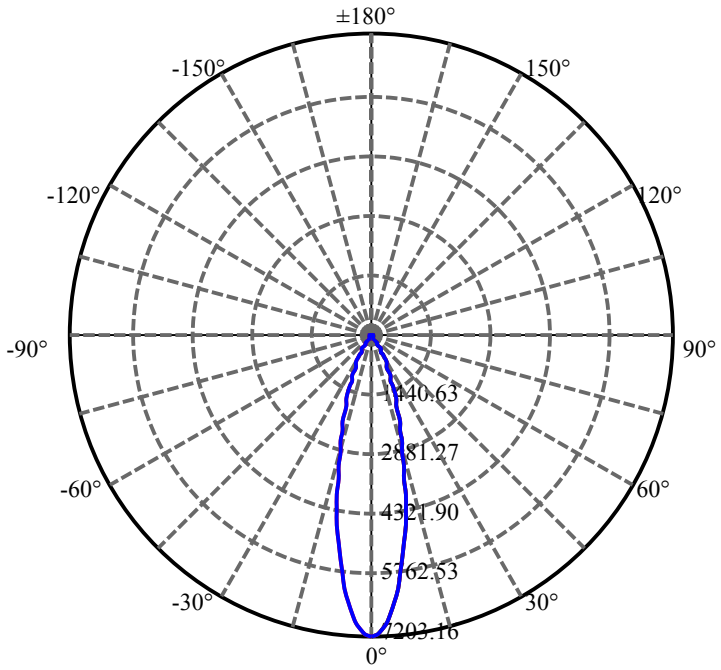
ZONAL LUMEN SUMMARY

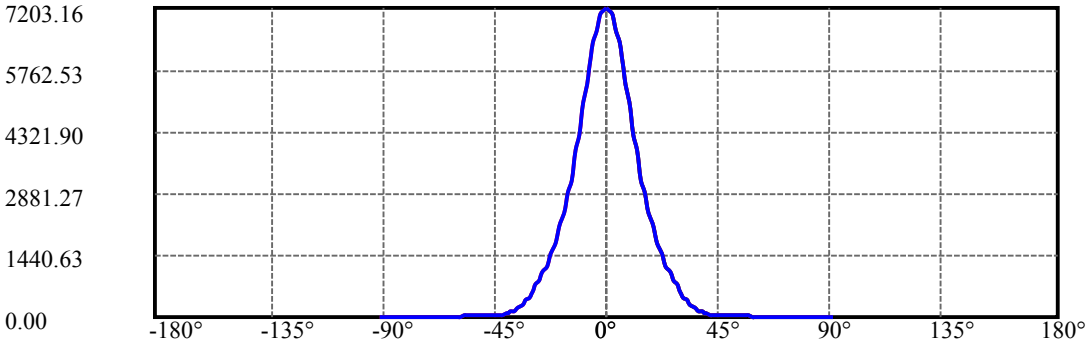
Zone	Lumens	%Lamp	%Fixt
0-30	1859.12	80.14%	88.19%
0-40	2012.04	86.73%	95.44%
0-60	2067.30	89.11%	98.06%
0-90	2107.13	90.83%	99.95%
0-120	2107.13	90.83%	99.95%
0-180	2108.09	90.87%	100.00%
60-90	39.83	1.72%	1.89%
90-120	0.00	0.00%	0.00%
90-130	0.00	0.00%	0.00%
90-150	0.00	0.00%	0.00%
90-180	0.00	0.00%	0.00%
0-25.60	1686.48	72.69%	80.00%

ZONAL LUMEN SUMMARY

0-10	552.87
10-20	813.90
20-30	492.36
30-40	152.91
40-50	33.98
50-60	21.28
60-70	17.12
70-80	13.10
80-90	9.61
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):

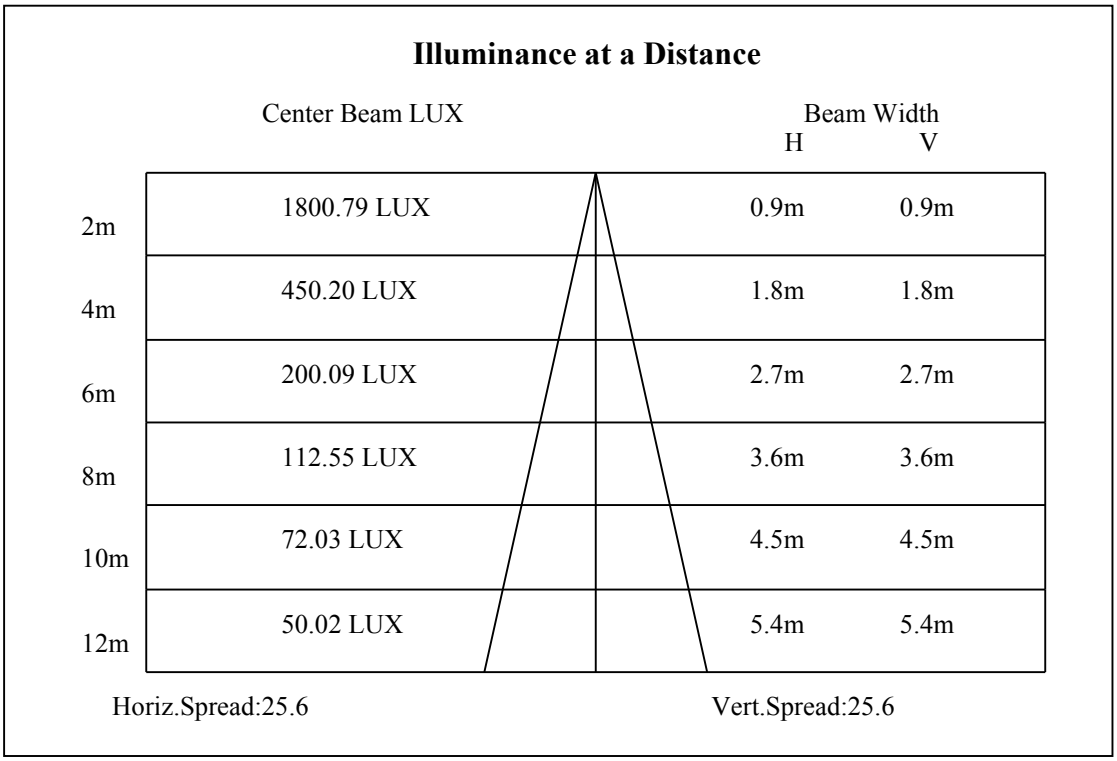
C0/C180:

C90/C270:

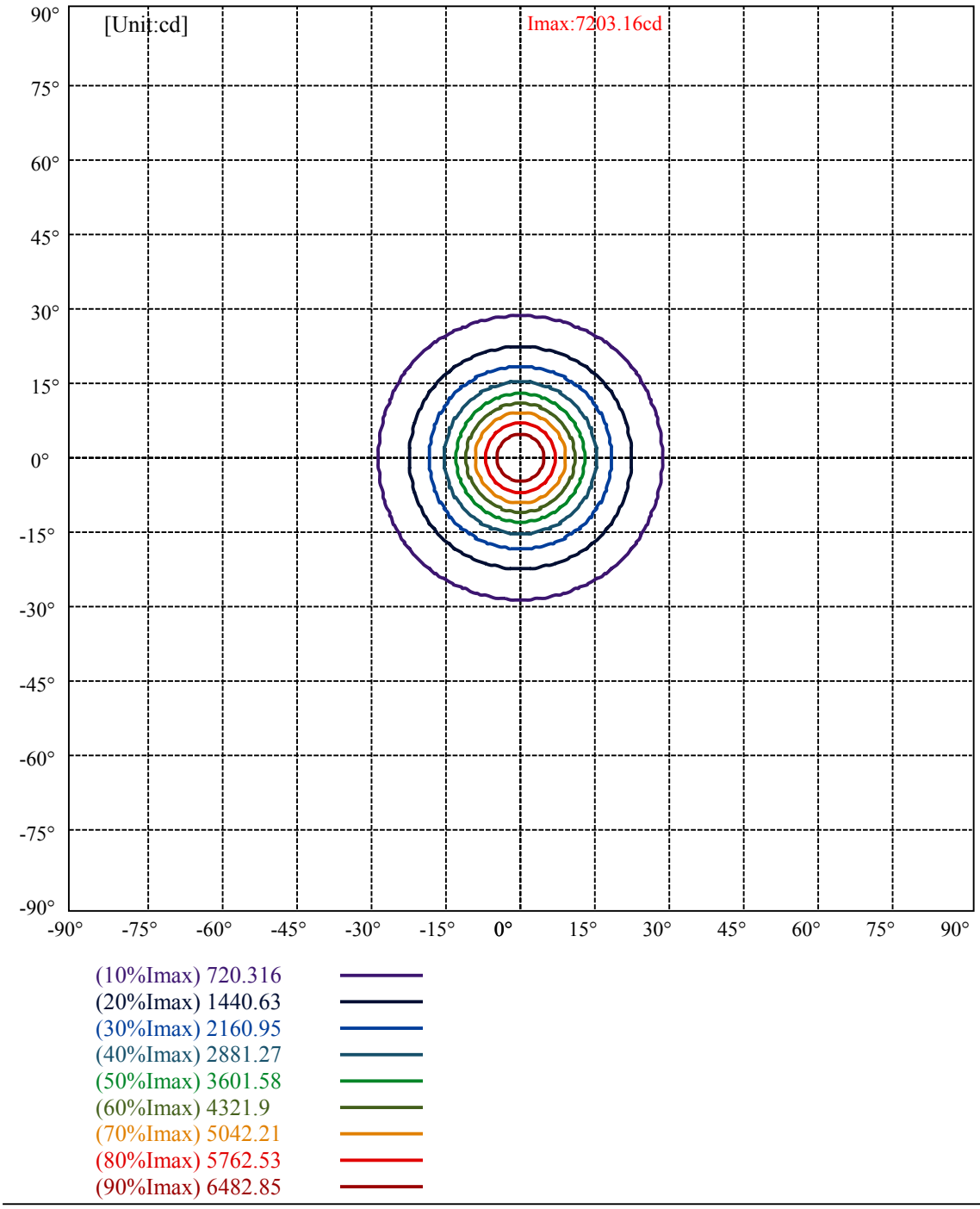
Field angle(10%Imax):C0/180Left:28.2 Right:28.2
:C90/270Left:28.2 Right:28.2

Beam Angle(50%Imax):C0/180Left:12.8 Right:12.8
:C90/270Left:12.8 Right:12.8

Lux distance Curve



ISO-Intensity(V-H)

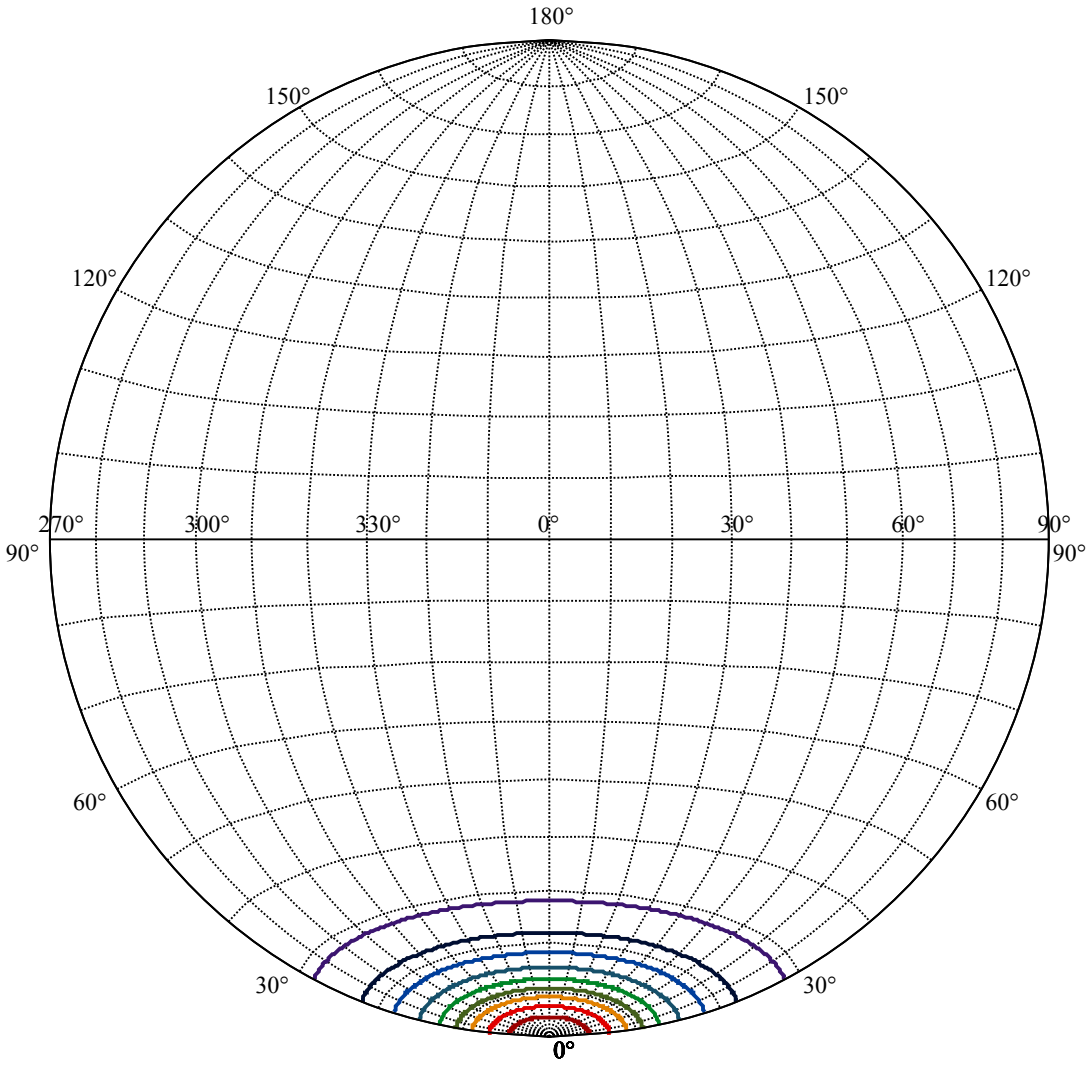


Equipment: GMS1980
Temperature(°C): 0.0

Date: 2023/10/13
Humidity(%): 0.0%

Operator: NT07
Distance(m): 7.44

ISO candela diagram on circular web



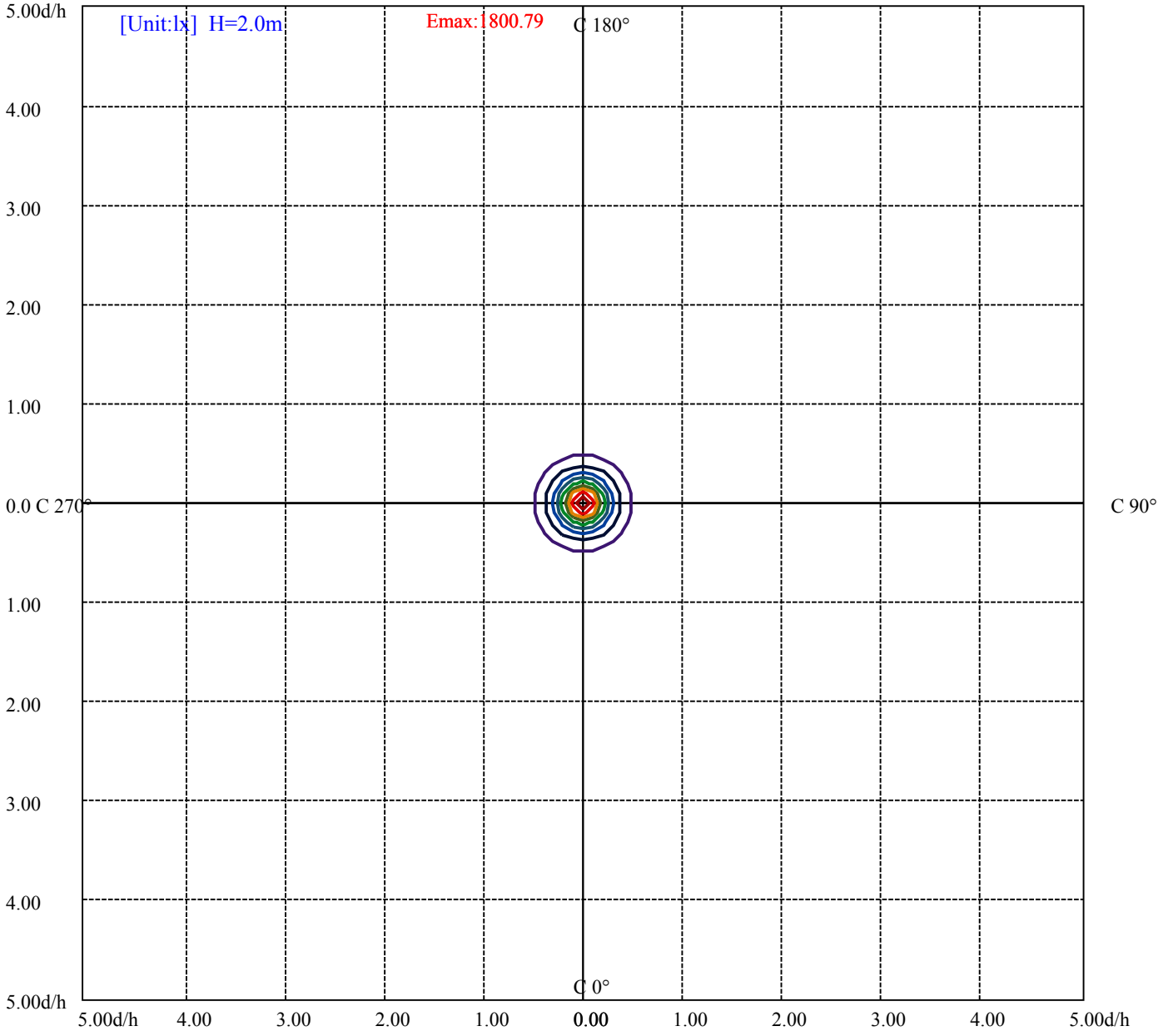
House [Unit:cd] Road

Imax:7203.16

(10%Imax) 720.316
(20%Imax) 1440.63
(30%Imax) 2160.95
(40%Imax) 2881.27
(50%Imax) 3601.58
(60%Imax) 4321.9
(70%Imax) 5042.21
(80%Imax) 5762.53
(90%Imax) 6482.85

Equipment: GMS1980 Date: 2023/10/13 Operator: NT07
Temperature(°C): 0.0 Humidity(%): 0.0% Distance(m): 7.44

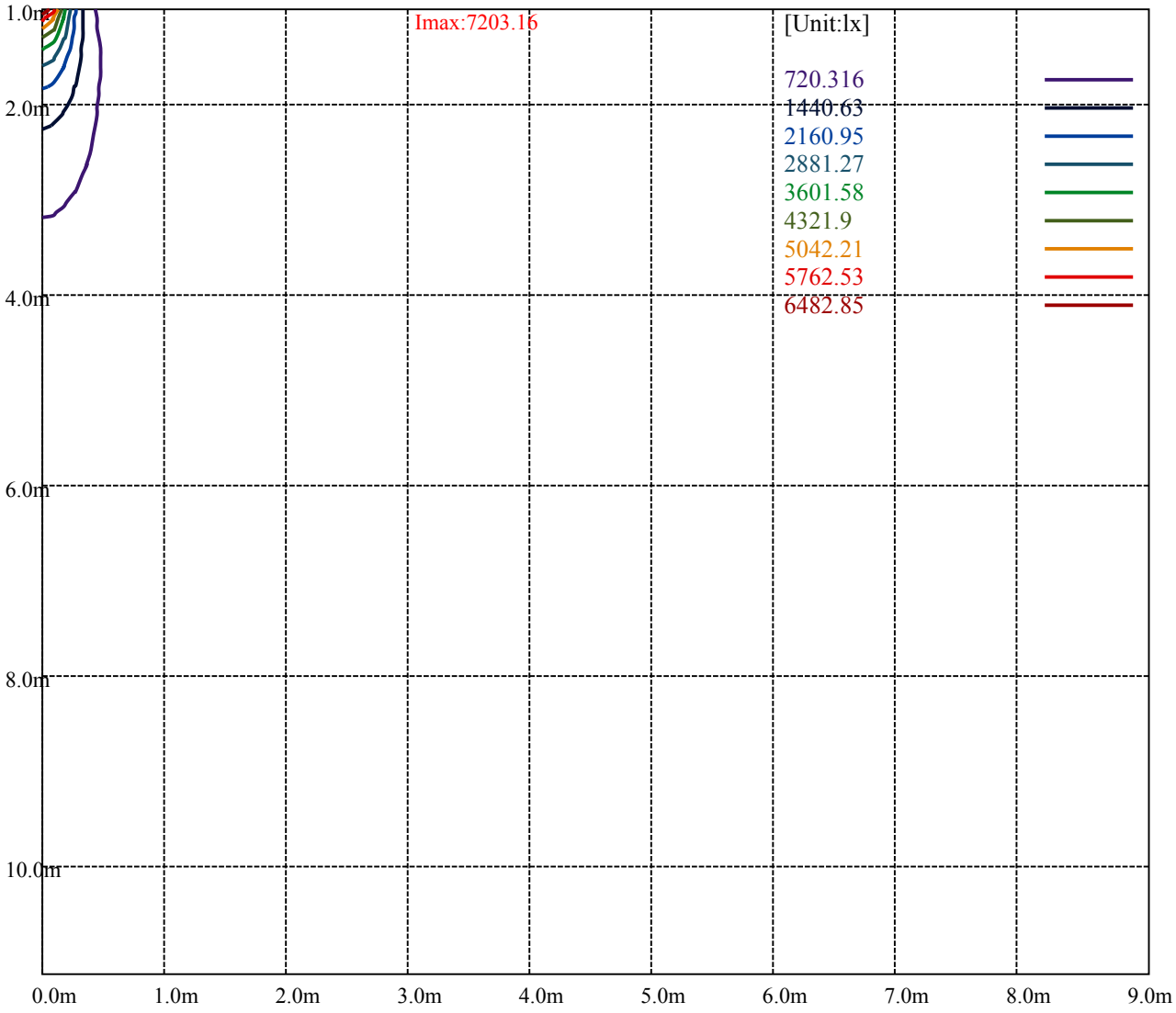
ISO illuminance diagram



(10%Emax) 180.079
(20%Emax) 360.1575
(30%Emax) 540.2375
(40%Emax) 720.315
(50%Emax) 900.395
(60%Emax) 1080.475
(70%Emax) 1260.552
(80%Emax) 1440.632
(90%Emax) 1620.71

Equipment: GMS1980
Temperature(°C): 0.0
Date: 2023/10/13
Humidity(%): 0.0%
Operator: NT07
Distance(m): 7.44

Space ISO Lux diagram



Equipment: GMS1980
Temperature(°C): 0.0

Date: 2023/10/13
Humidity(%): 0.0%

Operator: NT07
Distance(m): 7.44

Luminance Limitting Curve(no luminous side)

Luminance Table

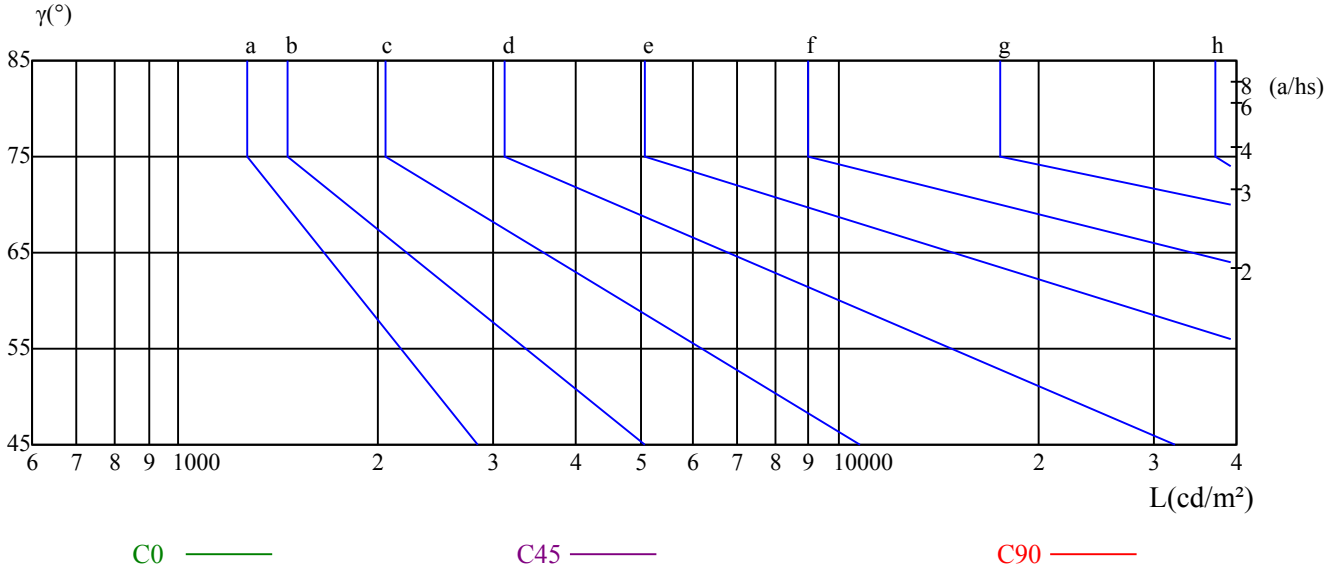
γ	45	50	55	60	65	70	75	80	85
C0	0	0	0	0	0	0	0	0	0
C45	0	0	0	0	0	0	0	0	0
C90	0	0	0	0	0	0	0	0	0

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): 0.0

Date: 2023/10/13
Humidity(%): 0.0%

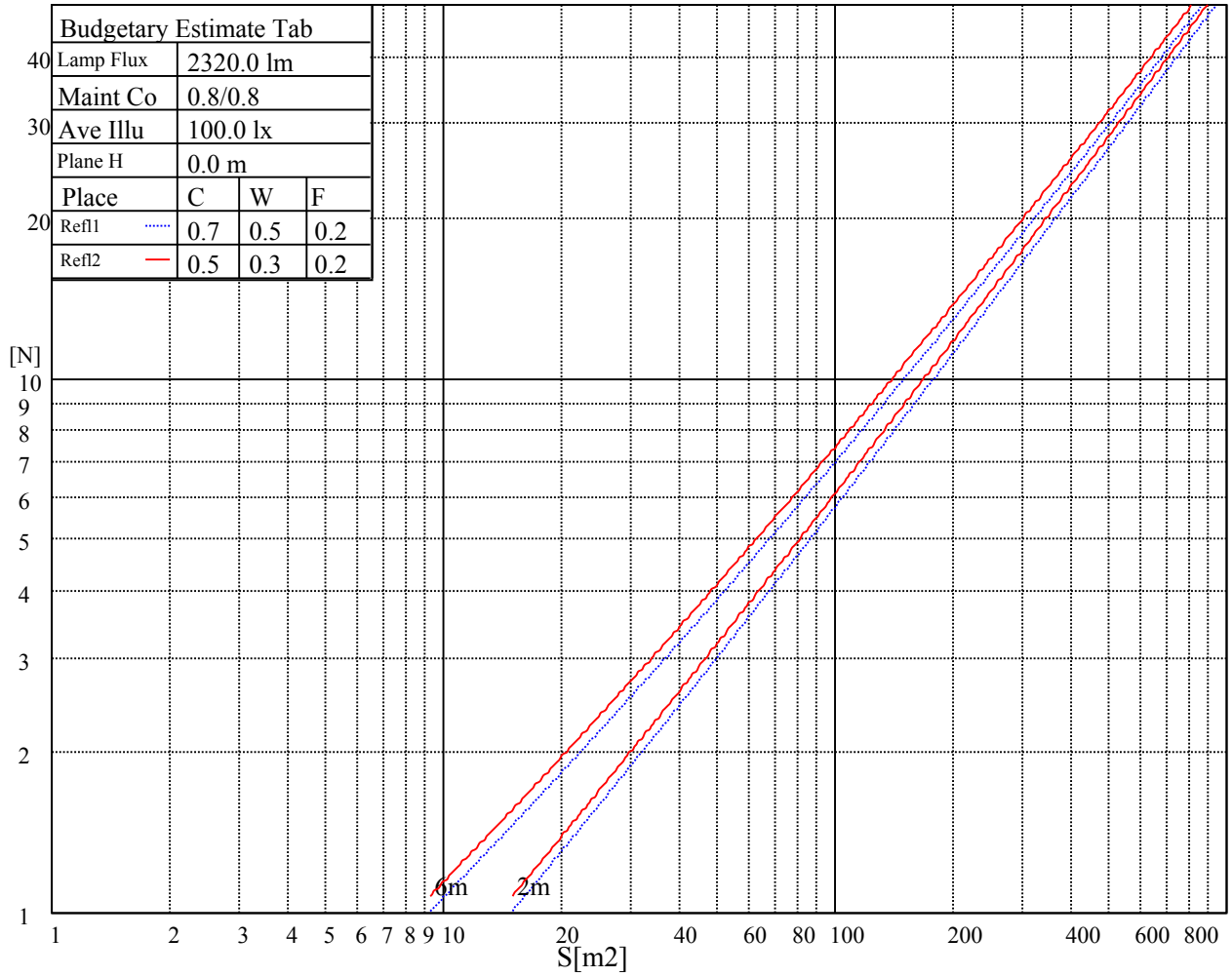
Operator: NT07
Distance(m): 7.44

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

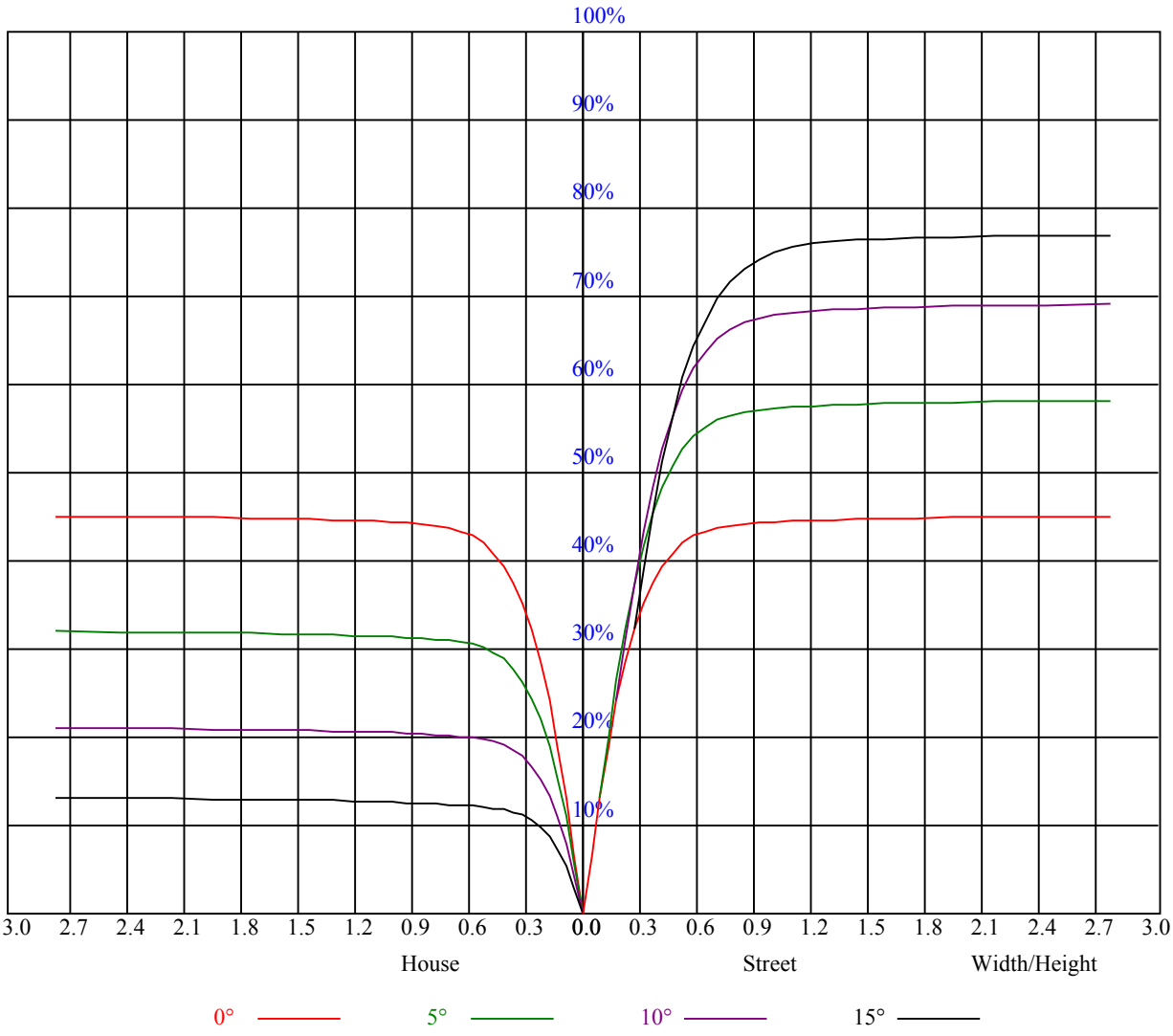


Equipment: GMS1980 Date: 2023/10/13 Operator: NT07
Temperature(°C): 0.0 Humidity(%): 0.0% Distance(m): 7.44

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	1.08	1.08	1.08	1.06	1.06	1.06	1.01	1.01	1.01	0.97	0.97	0.97	0.93	0.93	0.93	0.91
1	1.01	0.99	0.98	1.00	0.98	0.96	0.96	0.94	0.93	0.93	0.91	0.90	0.89	0.89	0.88	0.86
2	0.96	0.93	0.90	0.94	0.91	0.89	0.91	0.89	0.87	0.89	0.87	0.85	0.86	0.85	0.83	0.82
3	0.91	0.87	0.84	0.90	0.86	0.83	0.87	0.84	0.82	0.85	0.83	0.81	0.83	0.81	0.80	0.78
4	0.86	0.82	0.79	0.85	0.82	0.79	0.84	0.80	0.78	0.82	0.79	0.77	0.80	0.78	0.76	0.75
5	0.83	0.78	0.75	0.82	0.78	0.75	0.80	0.77	0.74	0.79	0.76	0.73	0.77	0.75	0.73	0.72
6	0.79	0.75	0.71	0.78	0.74	0.71	0.77	0.73	0.71	0.76	0.73	0.70	0.75	0.72	0.70	0.69
7	0.76	0.71	0.68	0.75	0.71	0.68	0.74	0.70	0.68	0.73	0.70	0.67	0.72	0.69	0.67	0.66
8	0.73	0.69	0.66	0.72	0.68	0.65	0.72	0.68	0.65	0.71	0.67	0.65	0.70	0.67	0.65	0.64
9	0.70	0.66	0.63	0.70	0.66	0.63	0.69	0.65	0.63	0.68	0.65	0.63	0.68	0.65	0.62	0.61
10	0.68	0.64	0.61	0.67	0.63	0.61	0.67	0.63	0.60	0.66	0.63	0.60	0.65	0.62	0.60	0.59

Coefficient Utilization Curve



Equipment: GMS1980	Date: 2023/10/13	Operator: NT07
Temperature(°C): 0.0	Humidity(%): 0.0%	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	7146.70	7007.21	6826.21	6623.06	6305.88	5995.35	5607.32	5274.09	4924.26
45.0	7220.88	7233.05	7157.77	6954.63	6747.60	6499.62	6149.78	5820.43	5508.24
90.0	7232.50	7177.70	7003.89	6780.26	6516.78	6226.73	5845.89	5511.56	5165.04
135.0	7212.57	7202.06	7126.22	6952.97	6741.51	6494.08	6221.19	5845.34	5518.20
180.0	7146.70	7212.57	7184.34	7097.99	6953.52	6717.71	6500.17	6229.49	5855.86
225.0	7220.88	7148.36	6997.80	6822.88	6623.61	6329.13	6034.10	5719.13	5364.87
270.0	7232.50	7223.64	7141.17	6997.80	6778.60	6568.26	6318.61	6023.58	5643.85
315.0	7212.57	7138.40	6995.03	6816.24	6554.97	6306.44	6010.29	5602.34	5260.25
360.0	7146.70	7007.21	6826.21	6623.06	6305.88	5995.35	5607.32	5274.09	4924.26

C/γ(°)	9.0	10.0	11.0	12.0	13.0	14.0	15.0	16.0	17.0
0.0	4484.20	4118.86	3765.71	3431.92	3080.43	2824.14	2581.69	2356.40	2107.87
45.0	5089.76	4743.80	4387.88	3945.05	3603.52	3298.52	3023.97	2703.47	2483.16
90.0	4820.19	4384.01	4033.62	3686.55	3300.18	3019.54	2757.72	2461.57	2266.18
135.0	5167.81	4705.61	4349.69	3995.42	3578.06	3276.93	3004.04	2680.77	2446.63
180.0	5518.20	5172.24	4711.70	4334.74	3967.19	3552.04	3256.45	2979.68	2671.36
225.0	4914.85	4555.60	4085.65	3749.10	3447.98	3100.36	2840.75	2600.51	2384.63
270.0	5303.98	4937.54	4563.90	4103.36	3751.87	3440.23	3092.05	2827.46	2598.85
315.0	4898.79	4431.61	4070.70	3724.19	3407.57	3058.29	2800.34	2561.76	2348.65
360.0	4484.20	4118.86	3765.71	3431.92	3080.43	2824.14	2581.69	2356.40	2107.87

C/γ(°)	18.0	19.0	20.0	21.0	22.0	23.0	24.0	25.0	26.0
0.0	1925.20	1756.37	1600.27	1426.46	1092.40	1092.40	1037.44	933.54	807.22
45.0	2278.91	2086.83	1864.86	1703.23	1519.46	1383.84	1260.40	1111.50	1000.24
90.0	2078.53	1854.90	1691.61	1538.28	1396.57	1085.48	1085.48	1003.62	898.55
135.0	2244.03	2057.49	1836.08	1677.21	1529.42	1392.14	1233.83	1114.27	1003.01
180.0	2454.38	2226.32	2043.65	1828.33	1661.72	1503.40	1375.54	1226.08	1112.05
225.0	2136.10	1951.21	1779.62	1623.52	1450.82	1233.83	1089.03	1089.03	958.95
270.0	2329.83	2129.45	1907.49	1741.42	1580.90	1431.44	1277.56	1156.34	1040.09
315.0	2101.78	1916.90	1745.85	1550.45	1416.50	1084.16	1084.16	1030.85	925.46
360.0	1925.20	1756.37	1600.27	1426.46	1092.40	1092.40	1037.44	933.54	807.22

C/γ(°)	27.0	28.0	29.0	30.0	31.0	32.0	33.0	34.0	35.0
0.0	708.30	615.92	533.11	440.34	372.03	309.48	255.90	199.22	162.19
45.0	891.19	785.47	664.24	575.68	495.97	425.12	343.75	287.29	287.29
90.0	771.02	673.32	579.83	498.79	409.34	345.41	274.11	226.01	184.60
135.0	864.62	757.79	636.57	548.55	470.51	399.65	322.71	281.75	281.75
180.0	976.99	871.27	774.95	654.28	562.39	482.68	409.62	327.69	286.18
225.0	854.83	729.12	633.96	545.12	446.65	376.74	314.91	261.49	205.69
270.0	934.92	805.95	701.33	606.68	500.40	428.44	362.57	291.71	291.71
315.0	799.42	701.05	607.23	522.76	429.10	361.63	302.06	250.53	196.84
360.0	708.30	615.92	533.11	440.34	372.03	309.48	255.90	199.22	162.19

C/γ(°)	36.0	37.0	38.0	39.0	40.0	41.0	42.0	43.0	44.0
0.0	132.57	108.83	85.91	72.40	60.06	53.03	47.55	42.23	38.69
45.0	225.23	146.96	120.01	94.32	78.99	67.59	56.96	50.87	46.05
90.0	143.64	118.07	97.64	78.60	67.53	59.06	52.64	46.16	41.96
135.0	178.63	138.99	113.36	93.10	77.77	63.55	55.63	49.54	43.73
180.0	286.18	180.45	140.71	115.47	95.65	77.11	66.20	57.73	49.54
225.0	168.77	138.66	114.64	91.78	77.88	67.25	57.18	51.04	46.00
270.0	233.09	158.37	132.30	111.32	93.94	76.72	65.65	56.96	50.54
315.0	161.25	131.91	104.18	86.68	70.41	61.00	54.14	48.66	43.23
360.0	132.57	108.83	85.91	72.40	60.06	53.03	47.55	42.23	38.69

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	35.65	32.49	30.44	28.67	27.18	25.79	24.80	24.13	23.53
45.0	41.24	38.14	35.26	32.88	30.28	28.51	27.18	26.13	24.96
90.0	38.47	35.54	32.55	30.50	28.73	27.01	25.91	24.74	24.02
135.0	40.08	36.31	33.71	31.55	29.17	27.62	26.40	25.41	24.47
180.0	44.45	40.46	36.48	33.82	31.55	29.61	27.68	26.40	25.35
225.0	41.07	37.97	34.65	32.55	30.67	29.17	27.57	26.46	25.63
270.0	44.39	40.63	37.53	34.87	32.16	30.33	28.51	27.34	26.29
315.0	39.69	36.75	34.15	31.50	29.72	27.84	27.01	25.63	24.91
360.0	35.65	32.49	30.44	28.67	27.18	25.79	24.80	24.13	23.53

C/γ(°)	54.0	55.0	56.0	57.0	58.0	59.0	60.0	61.0	62.0
0.0	22.92	22.36	21.75	21.26	20.76	19.93	19.32	18.76	18.21
45.0	24.24	23.69	22.97	22.42	21.81	21.26	20.59	19.82	19.04
90.0	23.41	22.86	22.14	21.64	21.15	20.59	19.71	19.10	18.60
135.0	23.91	23.36	22.92	22.42	21.86	21.37	20.81	19.87	19.21
180.0	24.52	23.75	23.14	22.64	22.03	21.53	20.92	20.20	19.60
225.0	24.91	24.13	23.53	22.81	22.25	21.42	20.65	19.71	19.04
270.0	25.35	24.69	24.08	23.41	22.58	22.03	21.37	20.59	19.71
315.0	24.19	23.64	23.14	22.47	21.86	21.31	20.37	19.65	19.04
360.0	22.92	22.36	21.75	21.26	20.76	19.93	19.32	18.76	18.21

C/γ(°)	63.0	64.0	65.0	66.0	67.0	68.0	69.0	70.0	71.0
0.0	17.49	16.99	16.55	16.00	15.28	14.78	14.34	13.73	13.28
45.0	18.49	17.88	17.33	16.77	16.27	15.72	15.17	14.56	14.06
90.0	17.88	17.33	16.88	16.27	15.72	15.17	14.56	14.12	13.56
135.0	18.49	17.93	17.44	16.83	16.27	15.78	15.28	14.67	14.17
180.0	18.82	18.21	17.60	17.10	16.55	16.00	15.44	15.00	14.39
225.0	18.43	17.66	17.10	16.61	16.05	15.33	14.78	14.28	13.78
270.0	19.04	18.43	17.66	17.10	16.61	15.89	15.33	14.67	14.17
315.0	18.43	17.71	17.16	16.66	16.16	15.50	14.95	14.45	13.84
360.0	17.49	16.99	16.55	16.00	15.28	14.78	14.34	13.73	13.28

C/γ(°)	72.0	73.0	74.0	75.0	76.0	77.0	78.0	79.0	80.0
0.0	12.90	12.45	12.18	11.85	11.57	11.35	11.07	10.85	10.57
45.0	13.45	13.01	12.62	12.18	11.90	11.62	11.29	10.96	10.74
90.0	13.06	12.68	12.34	12.07	11.68	11.40	11.13	10.85	10.57
135.0	13.67	13.23	12.84	12.57	12.29	12.01	11.79	11.51	11.24
180.0	13.95	13.45	13.01	12.68	12.40	12.12	11.85	11.62	11.29
225.0	13.17	12.79	12.45	12.07	11.73	11.40	11.18	10.90	10.68
270.0	13.73	13.28	12.79	12.45	12.18	11.90	11.51	11.24	11.02
315.0	13.34	12.84	12.51	12.23	11.90	11.62	11.35	11.13	10.90
360.0	12.90	12.45	12.18	11.85	11.57	11.35	11.07	10.85	10.57

C/γ(°)	81.0	82.0	83.0	84.0	85.0	86.0	87.0	88.0	89.0
0.0	10.35	10.07	9.85	9.63	9.41	9.13	8.97	8.80	8.80
45.0	10.46	10.19	9.96	9.74	9.47	9.24	9.08	8.91	8.75
90.0	10.35	10.07	9.85	9.69	9.41	9.24	9.08	8.91	8.80
135.0	11.02	10.74	10.46	10.19	9.74	9.41	9.30	9.13	9.02
180.0	11.02	10.68	10.41	10.19	9.96	9.58	9.30	9.08	8.97
225.0	10.41	10.24	10.02	9.80	9.69	9.30	9.08	8.91	8.75
270.0	10.74	10.52	10.24	10.02	9.85	9.69	9.30	9.08	8.97
315.0	10.68	10.52	10.24	10.07	9.91	9.52	9.19	8.97	8.80
360.0	10.35	10.07	9.85	9.63	9.41	9.13	8.97	8.80	8.80

Intensity data(cd)

C/γ(°)	90.0
0.0	8.75
45.0	8.75
90.0	8.80
135.0	8.86
180.0	8.75
225.0	8.75
270.0	8.75
315.0	8.80
360.0	8.75