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NATA

Client:
LumCAT: 2-2641-L Luminaire:
92.70.411.00 Report No: 2023830-B003
Ballast type: AC
Test No: 2023830-C003

LampCAT: LUXEON CoB 1208 LES15	Voltage(V): 33.900
Lamp flux(lm): 2357.0 Number of Lamps: 1	Current(A): 0.502
Length(mm): 0	Power (W): 17.017
Phm Type: C	PF: 0.000
	Width(mm): 0
	Height(mm): 0

Photometric Results

Lumens(lm): 2162.02, Efficiency(%): 91.73% , Luminous Efficacy(lm/W): 127.05
Central intensity(cd): 4796.888, Maximum intensity(cd): 4796.888
Angle of maximum intensity: C=0.0 γ=0.0
Beam Angle(50%Imax): [C0/180]Total=36.8
[C90/270]Total=36.8
Field angle(10%Imax): [C0/180]Total=65.0
[C90/270]Total=65.0
Maximum s/h(1/2): C0_180=0.60 C90_270=0.60
Maximum s/h(1/4): C0_180=0.61 C90_270=0.61
Up flux rate of lamp(%): 0.00%
Down flux rate of lamp(%): 91.73%
Up flux rate of LUM(%): - -
Down flux rate of LUM(%): 100.00%
CIE Type : Direct lighting
Output flux ratio in π solid angle : 97.896%

Zonal flux distribution table

γ(°)	Average I(cd)	Zonal F(lm)	Sum F(lm)	Eff Flux(%)	Eff Sum(%)
0.0	4796.888	0.000	0	0.00%	0.00%
1.0	4783.326	4.584	4.584	0.19%	0.21%
2.0	4755.442	13.691	18.275	0.58%	0.85%
3.0	4702.441	22.620	40.895	0.96%	1.89%
4.0	4634.425	31.253	72.149	1.33%	3.34%
5.0	4552.917	39.523	111.672	1.68%	5.17%
6.0	4457.501	47.352	159.024	2.01%	7.36%
7.0	4338.629	54.597	213.622	2.32%	9.88%
8.0	4209.655	61.178	274.8	2.60%	12.71%
9.0	4075.146	67.144	341.944	2.85%	15.82%
10.0	3913.721	72.296	414.24	3.07%	19.16%
11.0	3753.472	76.611	490.851	3.25%	22.70%
12.0	3570.736	80.064	570.915	3.40%	26.41%
13.0	3402.115	82.750	653.665	3.51%	30.23%
14.0	3213.152	84.675	738.34	3.59%	34.15%
15.0	3038.788	85.829	824.17	3.64%	38.12%
16.0	2860.757	86.445	910.614	3.67%	42.12%
17.0	2650.206	85.820	996.435	3.64%	46.09%
18.0	2471.414	84.444	1080.879	3.58%	49.99%
19.0	2271.103	82.510	1163.389	3.50%	53.81%
20.0	2078.057	79.602	1242.991	3.38%	57.49%
21.0	1903.624	76.456	1319.447	3.24%	61.03%
22.0	1741.992	73.260	1392.708	3.11%	64.42%
23.0	1584.787	69.805	1462.512	2.96%	67.65%
24.0	1417.793	65.647	1528.16	2.79%	70.68%
25.0	1252.244	60.711	1588.87	2.58%	73.49%
26.0	1177.987	57.366	1646.236	2.43%	76.14%
27.0	1072.988	55.071	1701.307	2.34%	78.69%
28.0	945.564	51.105	1752.412	2.17%	81.05%
29.0	831.017	46.480	1798.893	1.97%	83.20%
30.0	721.894	41.928	1840.821	1.78%	85.14%
31.0	611.879	37.117	1877.938	1.57%	86.86%
32.0	526.544	32.614	1910.552	1.38%	88.37%
33.0	440.262	28.482	1939.035	1.21%	89.69%
34.0	361.251	24.256	1963.291	1.03%	90.81%
35.0	293.602	20.337	1983.628	0.86%	91.75%
36.0	245.798	17.175	2000.803	0.73%	92.54%
37.0	217.560	15.112	2015.915	0.64%	93.24%

Zonal flux distribution table

γ(°)	Average I(cd)	Zonal F(lm)	Sum F(lm)	Eff Flux(%)	Eff Sum(%)
38.0	149.067	12.238	2028.153	0.52%	93.81%
39.0	106.445	8.721	2036.874	0.37%	94.21%
40.0	90.046	6.853	2043.727	0.29%	94.53%
41.0	79.889	6.051	2049.778	0.26%	94.81%
42.0	73.011	5.555	2055.333	0.24%	95.07%
43.0	67.019	5.187	2060.521	0.22%	95.31%
44.0	61.532	4.852	2065.372	0.21%	95.53%
45.0	57.014	4.556	2069.928	0.19%	95.74%
46.0	53.271	4.313	2074.241	0.18%	95.94%
47.0	49.479	4.087	2078.328	0.17%	96.13%
48.0	45.964	3.858	2082.186	0.16%	96.31%
49.0	43.031	3.655	2085.841	0.16%	96.48%
50.0	40.041	3.464	2089.304	0.15%	96.64%
51.0	37.647	3.287	2092.591	0.14%	96.79%
52.0	35.323	3.131	2095.723	0.13%	96.93%
53.0	33.254	2.983	2098.706	0.13%	97.07%
54.0	31.475	2.853	2101.559	0.12%	97.20%
55.0	29.787	2.735	2104.293	0.12%	97.33%
56.0	28.320	2.626	2106.919	0.11%	97.45%
57.0	26.964	2.528	2109.447	0.11%	97.57%
58.0	25.739	2.437	2111.884	0.10%	97.68%
59.0	24.674	2.357	2114.241	0.10%	97.79%
60.0	23.643	2.283	2116.523	0.10%	97.90%
61.0	22.730	2.213	2118.736	0.09%	98.00%
62.0	21.879	2.149	2120.886	0.09%	98.10%
63.0	21.090	2.090	2122.976	0.09%	98.19%
64.0	20.280	2.030	2125.006	0.09%	98.29%
65.0	19.609	1.974	2126.98	0.08%	98.38%
66.0	18.945	1.924	2128.903	0.08%	98.47%
67.0	18.267	1.871	2130.774	0.08%	98.56%
68.0	17.665	1.820	2132.595	0.08%	98.64%
69.0	17.049	1.771	2134.365	0.08%	98.72%
70.0	16.488	1.722	2136.088	0.07%	98.80%
71.0	15.963	1.677	2137.765	0.07%	98.88%
72.0	15.423	1.632	2139.397	0.07%	98.95%
73.0	14.945	1.588	2140.985	0.07%	99.03%
74.0	14.447	1.545	2142.53	0.07%	99.10%
75.0	13.970	1.501	2144.032	0.06%	99.17%

Zonal flux distribution table

γ(°)	Average I(cd)	Zonal F(lm)	Sum F(lm)	Eff Flux(%)	Eff Sum(%)
76.0	13.527	1.460	2145.491	0.06%	99.24%
77.0	13.063	1.418	2146.909	0.06%	99.30%
78.0	12.621	1.375	2148.284	0.06%	99.36%
79.0	12.226	1.335	2149.619	0.06%	99.43%
80.0	11.811	1.296	2150.915	0.05%	99.49%
81.0	11.403	1.255	2152.17	0.05%	99.54%
82.0	10.995	1.215	2153.385	0.05%	99.60%
83.0	10.628	1.175	2154.56	0.05%	99.66%
84.0	10.337	1.142	2155.702	0.05%	99.71%
85.0	10.061	1.113	2156.816	0.05%	99.76%
86.0	9.811	1.086	2157.902	0.05%	99.81%
87.0	9.590	1.062	2158.964	0.05%	99.86%
88.0	9.355	1.038	2160.002	0.04%	99.91%
89.0	9.147	1.014	2161.016	0.04%	99.95%
90.0	9.085	1.000	2162.015	0.04%	100.00%

Zonal flux distribution table

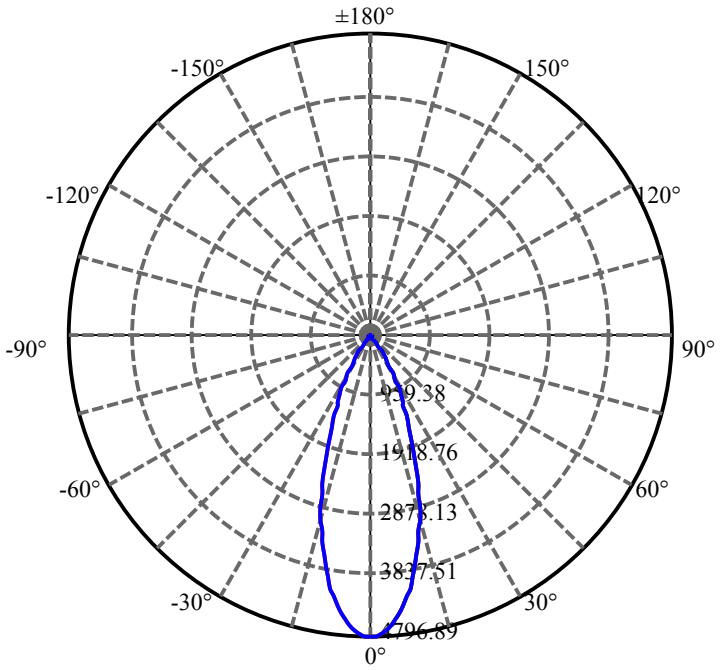
ZONAL LUMEN SUMMARY

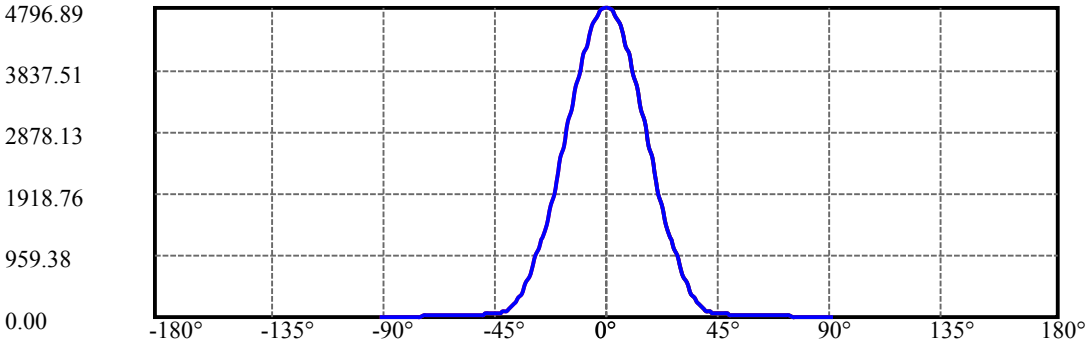
Zone	Lumens	%Lamp	%Fixt
0-30	1840.82	78.10%	85.14%
0-40	2043.73	86.71%	94.53%
0-60	2116.52	89.80%	97.90%
0-90	2161.02	91.68%	99.95%
0-120	2161.02	91.68%	99.95%
0-180	2162.02	91.73%	100.00%
60-90	44.49	1.89%	2.06%
90-120	0.00	0.00%	0.00%
90-130	0.00	0.00%	0.00%
90-150	0.00	0.00%	0.00%
90-180	0.00	0.00%	0.00%
0-27.55	1729.61	73.38%	80.00%

ZONAL LUMEN SUMMARY

0-10	414.24
10-20	828.75
20-30	597.83
30-40	202.91
40-50	45.58
50-60	27.22
60-70	19.56
70-80	14.83
80-90	10.10
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:

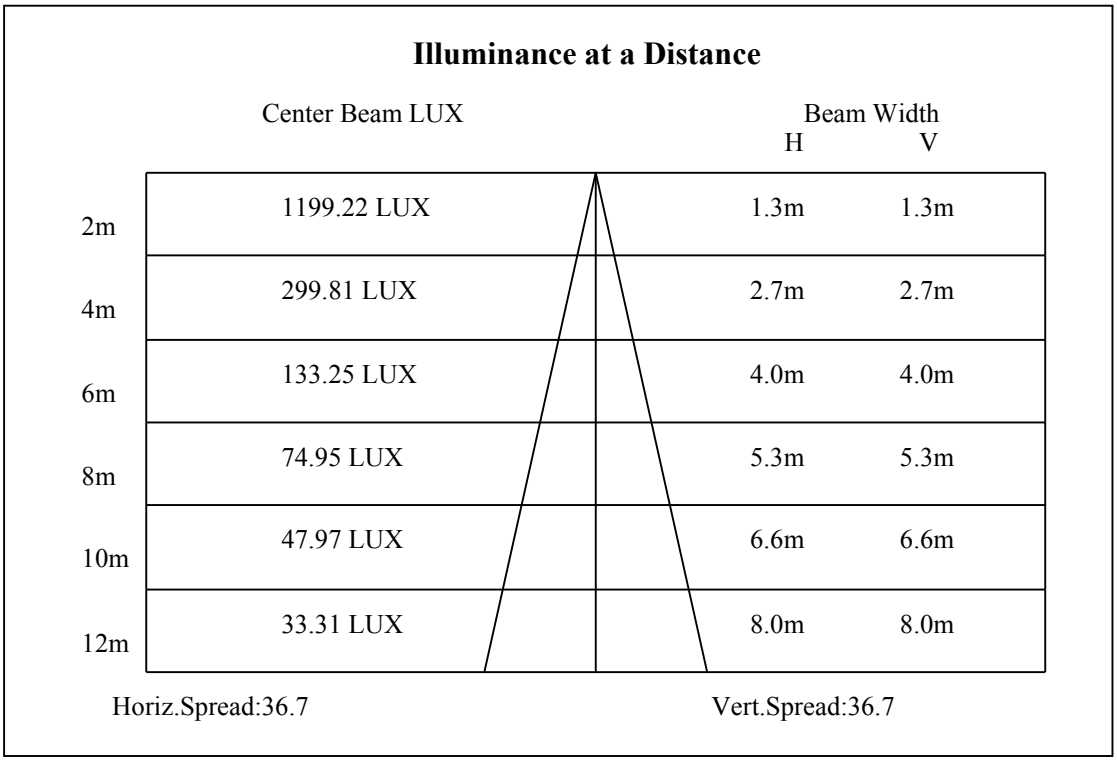
C90/C270:

Field angle(10%Imax):C0/180Left:32.5 Right:32.5
:C90/270Left:32.5 Right:32.5

Beam Angle(50%Imax):C0/180Left:18.4 Right:18.4
:C90/270Left:18.4 Right:18.4

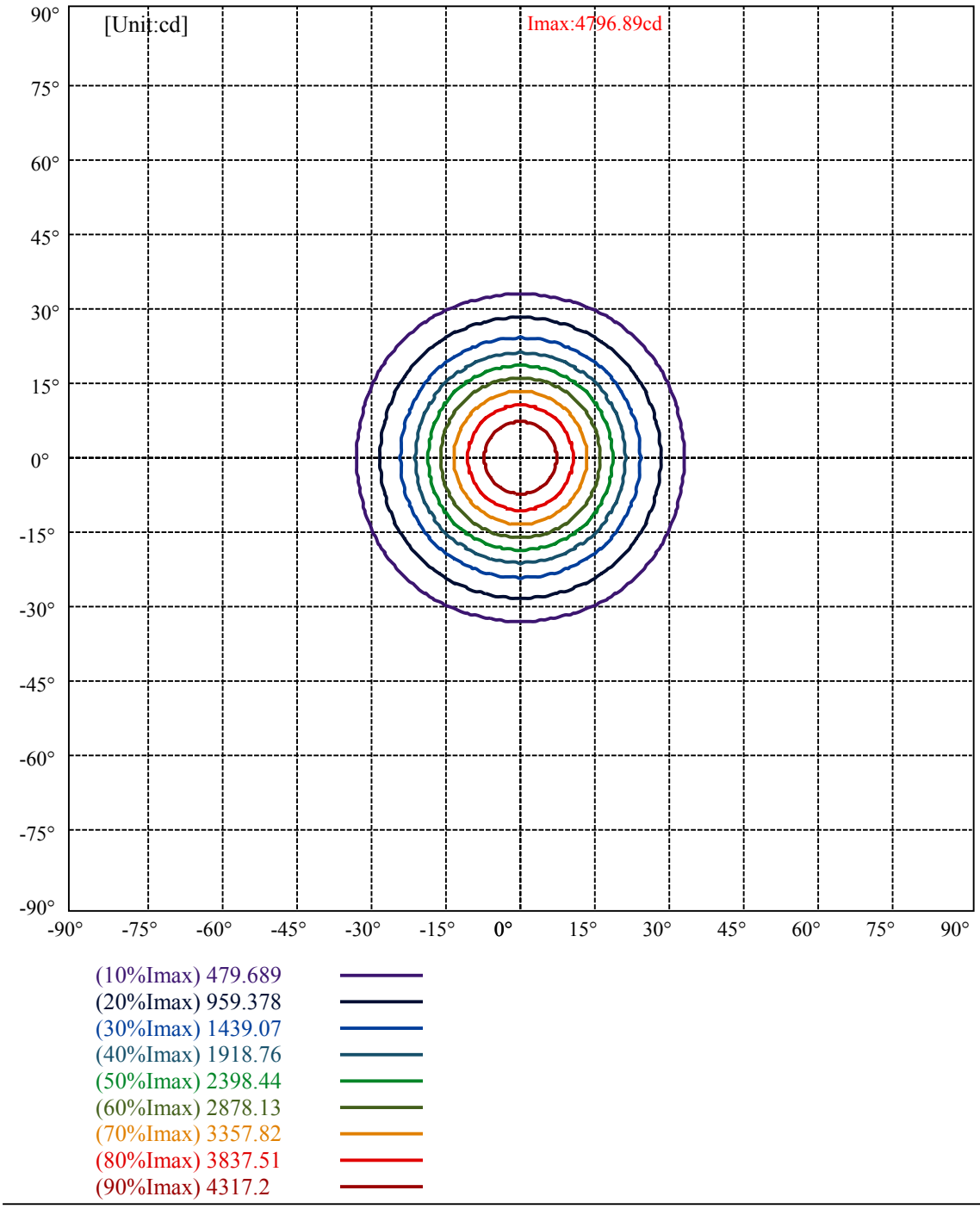
Equipment: GMS1980 Date: 2023/8/30 Operator: NT07
Temperature(°C): 25.0 Humidity(%): 60.0% Distance(m): 7.44

Lux distance Curve



Equipment: GMS1980 Date: 2023/8/30 Operator: NT07
Temperature(°C): 25.0 Humidity(%): 60.0% Distance(m): 7.44

ISO-Intensity(V-H)

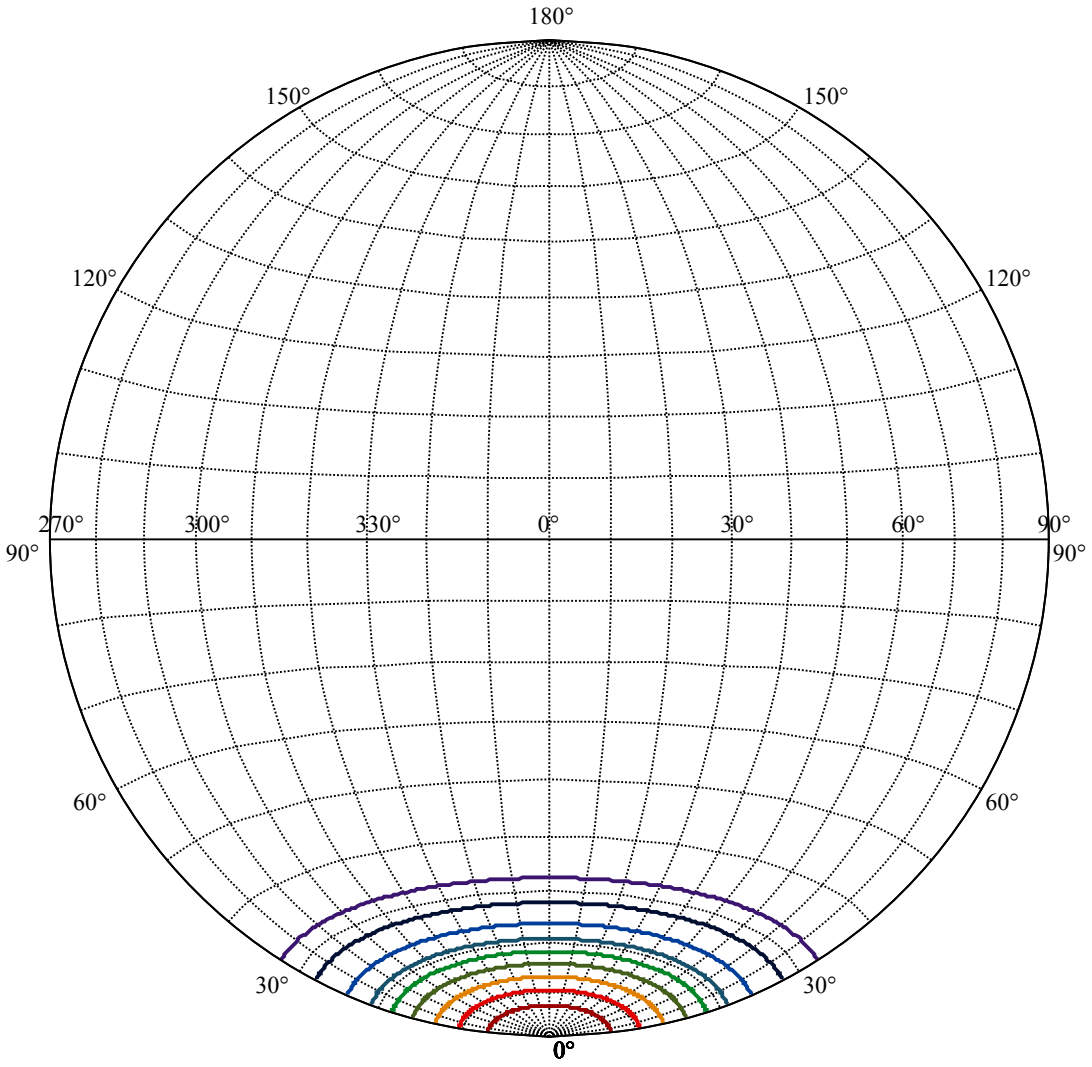


Equipment: GMS1980
Temperature(°C): 25.0

Date: 2023/8/30
Humidity(%): 60.0%

Operator: NT07
Distance(m): 7.44

ISO candela diagram on circular web



House [Unit:cd] Road

Imax:4796.89

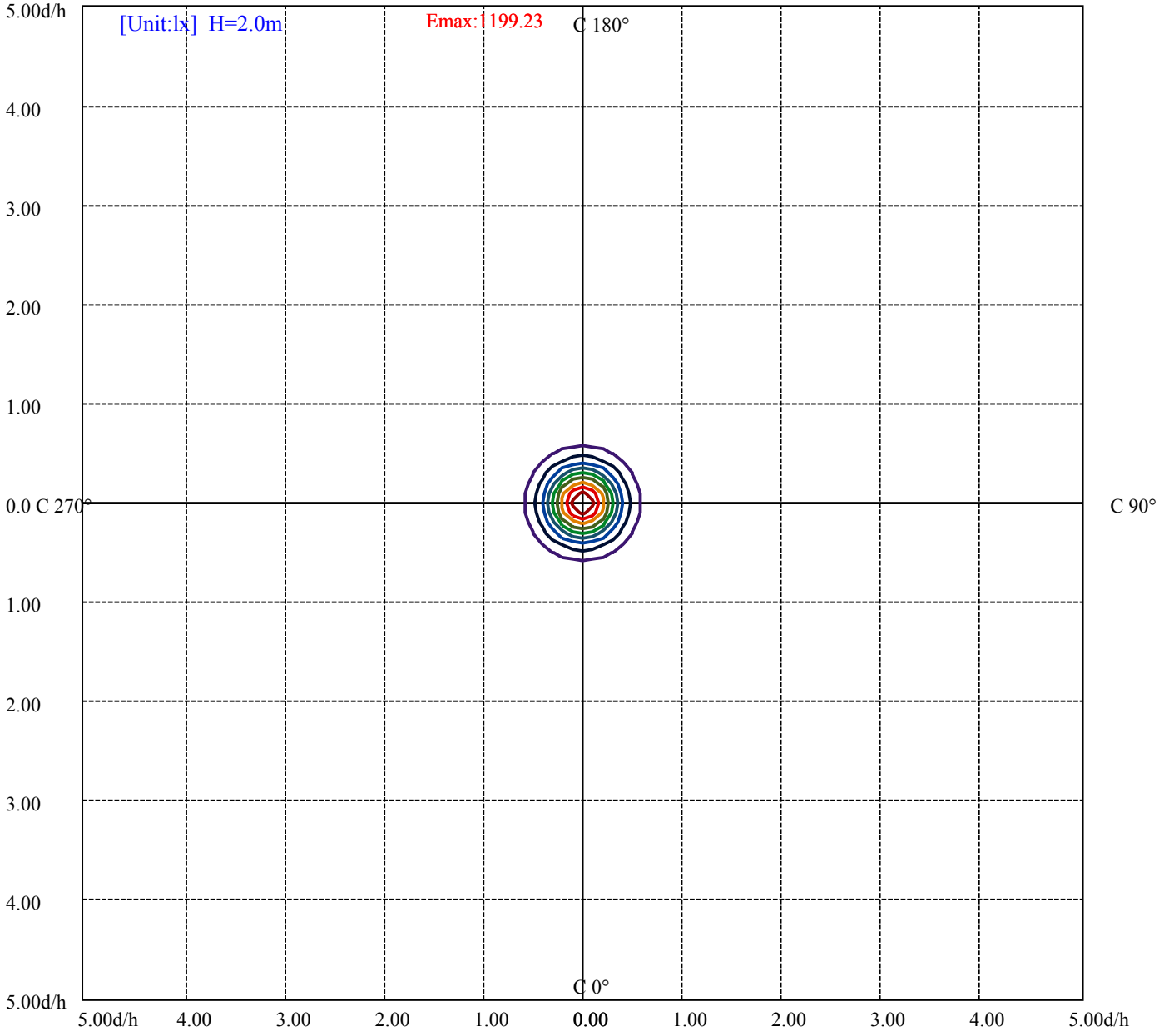
(10%Imax) 479.689
(20%Imax) 959.378
(30%Imax) 1439.07
(40%Imax) 1918.76
(50%Imax) 2398.44
(60%Imax) 2878.13
(70%Imax) 3357.82
(80%Imax) 3837.51
(90%Imax) 4317.2

Equipment: GMS1980
Temperature(°C): 25.0

Date: 2023/8/30
Humidity(%): 60.0%

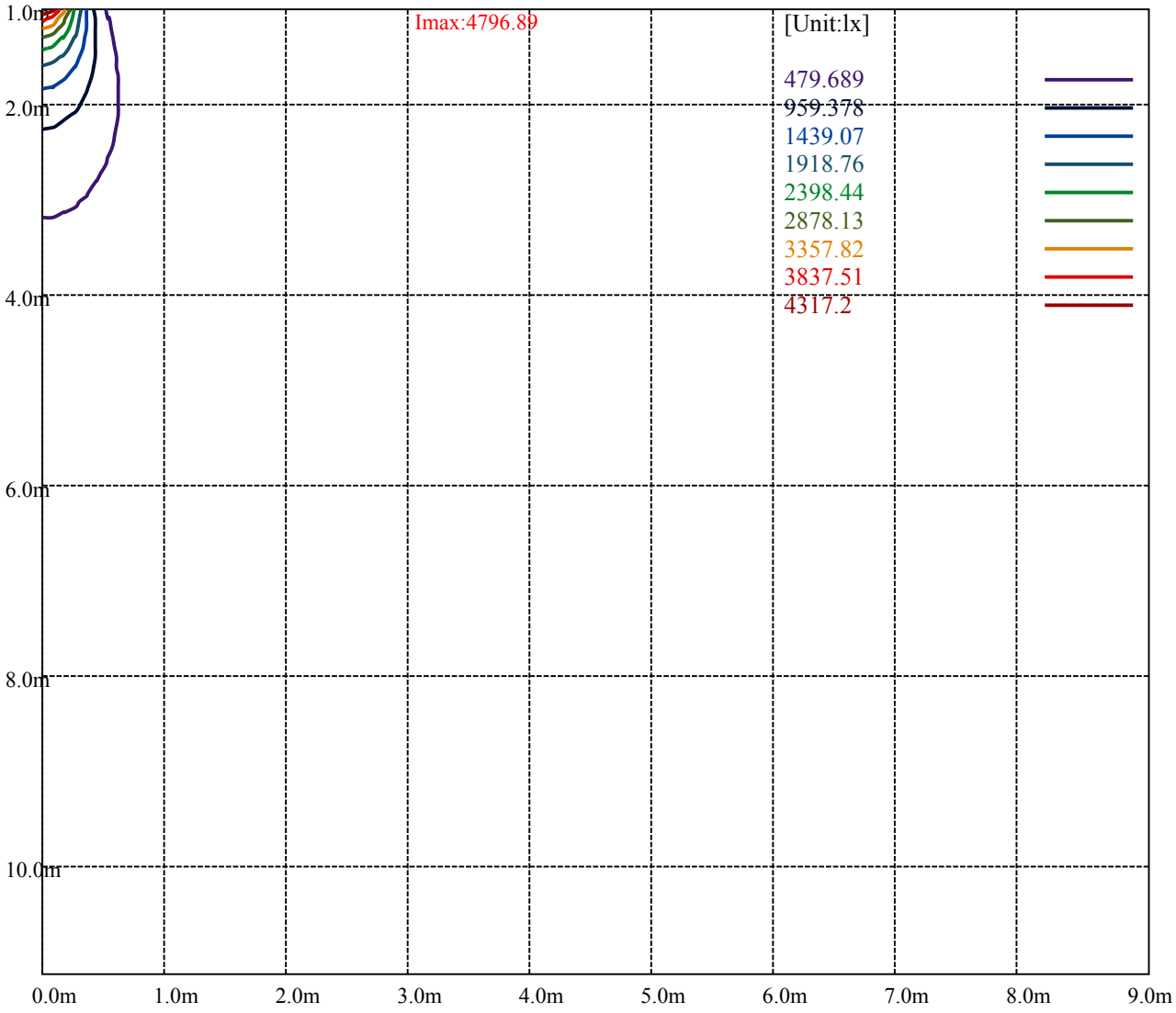
Operator: NT07
Distance(m): 7.44

ISO illuminance diagram



Equipment: GMS1980	Date: 2023/8/30	Operator: NT07
Temperature(°C): 25.0	Humidity(%): 60.0%	Distance(m): 7.44

Space ISO Lux diagram



Equipment: GMS1980
Temperature(°C): 25.0

Date: 2023/8/30
Humidity(%): 60.0%

Operator: NT07
Distance(m): 7.44

Luminance Limitting Curve(no luminous side)

Luminance Table

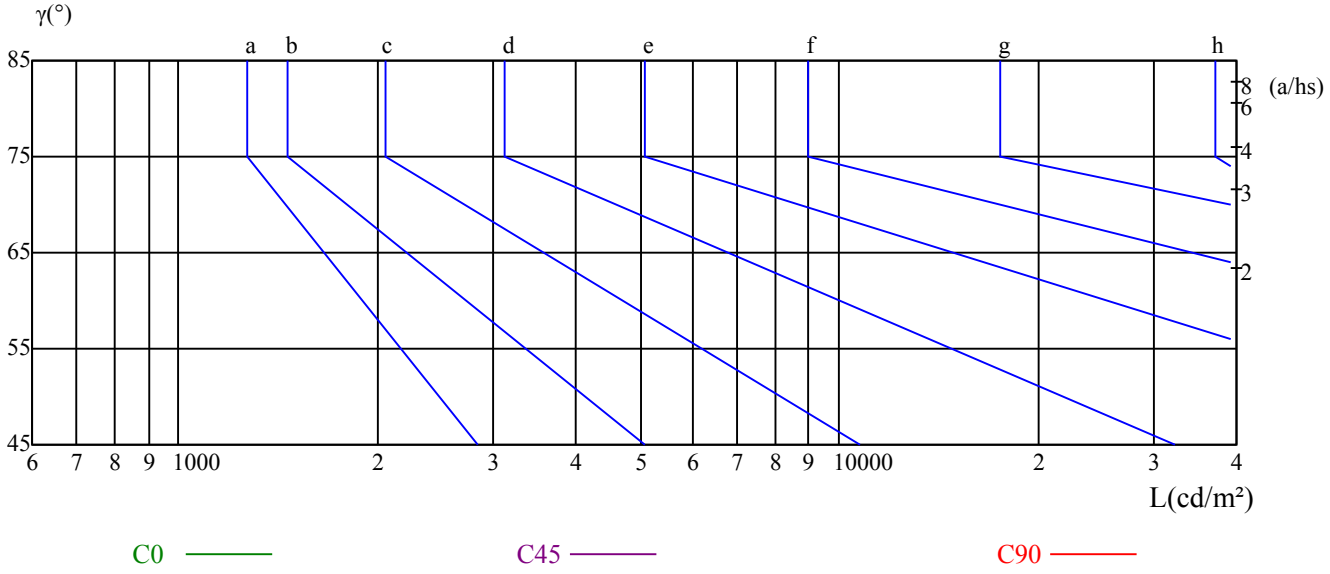
γ	45	50	55	60	65	70	75	80	85
C0	0	0	0	0	0	0	0	0	0
C45	0	0	0	0	0	0	0	0	0
C90	0	0	0	0	0	0	0	0	0

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

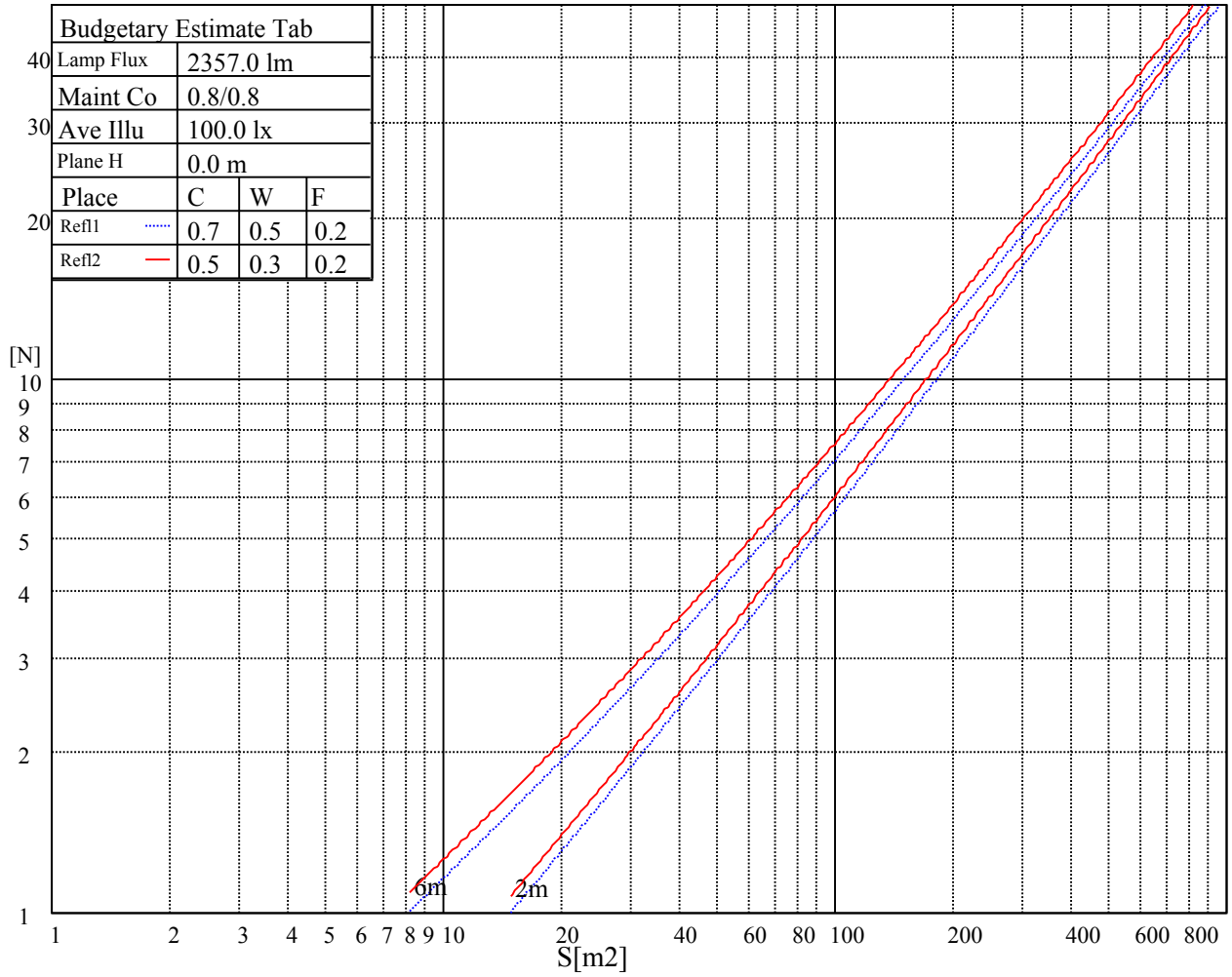


UGR Glare

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

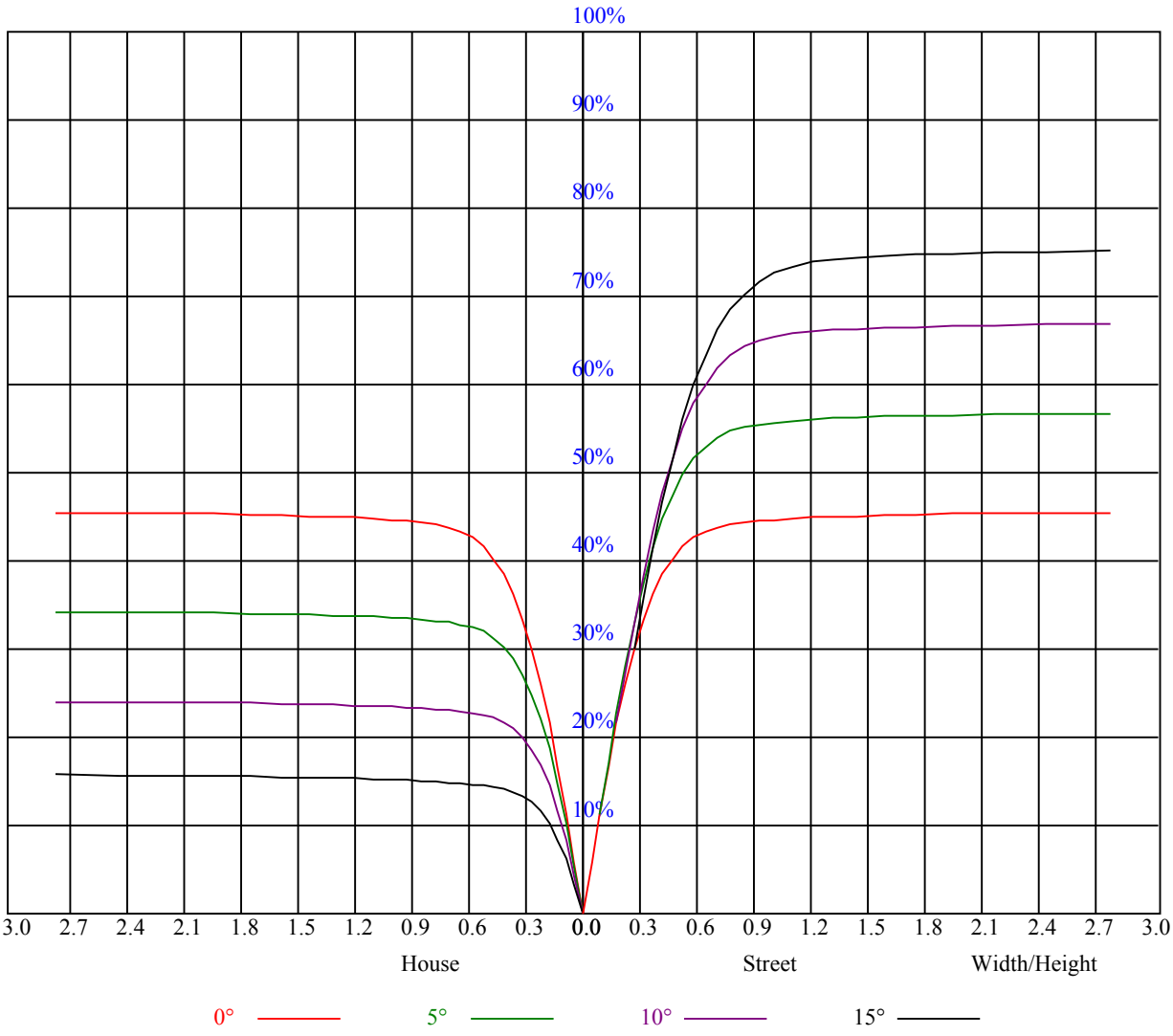


Equipment: GMS1980 Date: 2023/8/30 Operator: NT07
Temperature(°C): 25.0 Humidity(%): 60.0% Distance(m): 7.44

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	1.09	1.09	1.09	1.07	1.07	1.07	1.02	1.02	1.02	0.98	0.98	0.98	0.94	0.94	0.94	0.92
1	1.02	1.00	0.98	1.00	0.98	0.96	0.96	0.95	0.93	0.93	0.92	0.91	0.90	0.89	0.88	0.86
2	0.96	0.92	0.90	0.94	0.91	0.89	0.91	0.89	0.87	0.89	0.87	0.85	0.86	0.84	0.83	0.82
3	0.90	0.86	0.83	0.89	0.85	0.82	0.87	0.84	0.81	0.85	0.82	0.80	0.83	0.80	0.79	0.77
4	0.86	0.81	0.78	0.85	0.80	0.77	0.83	0.79	0.76	0.81	0.78	0.75	0.79	0.77	0.75	0.73
5	0.81	0.76	0.73	0.80	0.76	0.73	0.79	0.75	0.72	0.77	0.74	0.71	0.76	0.73	0.71	0.70
6	0.77	0.73	0.69	0.77	0.72	0.69	0.75	0.71	0.68	0.74	0.71	0.68	0.73	0.70	0.67	0.66
7	0.74	0.69	0.66	0.73	0.69	0.65	0.72	0.68	0.65	0.71	0.67	0.65	0.70	0.67	0.64	0.63
8	0.70	0.66	0.62	0.70	0.65	0.62	0.69	0.65	0.62	0.68	0.65	0.62	0.67	0.64	0.62	0.60
9	0.67	0.63	0.60	0.67	0.63	0.60	0.66	0.62	0.59	0.66	0.62	0.59	0.65	0.61	0.59	0.58
10	0.65	0.60	0.57	0.64	0.60	0.57	0.64	0.60	0.57	0.63	0.59	0.57	0.62	0.59	0.57	0.56

Coefficient Utilization Curve



Equipment: GMS1980	Date: 2023/8/30	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	4778.07	4739.87	4680.65	4610.90	4507.39	4418.27	4307.56	4188.55	4010.31
45.0	4807.96	4798.55	4775.85	4722.16	4657.40	4583.22	4502.96	4371.77	4258.85
90.0	4802.98	4788.58	4748.18	4693.38	4624.74	4520.67	4424.91	4303.13	4148.14
135.0	4798.55	4795.78	4778.62	4732.68	4679.54	4605.36	4530.08	4413.29	4295.38
180.0	4778.07	4796.33	4801.87	4787.48	4735.45	4668.47	4590.42	4493.00	4390.59
225.0	4807.96	4775.85	4744.86	4675.66	4607.58	4527.87	4407.20	4287.63	4160.87
270.0	4802.98	4802.98	4784.16	4733.78	4675.11	4603.15	4518.46	4391.15	4284.31
315.0	4798.55	4768.66	4729.36	4663.49	4588.20	4496.32	4378.41	4260.51	4128.77
360.0	4778.07	4739.87	4680.65	4610.90	4507.39	4418.27	4307.56	4188.55	4010.31

C/γ(°)	9.0	10.0	11.0	12.0	13.0	14.0	15.0	16.0	17.0
0.0	3869.16	3709.74	3543.68	3335.00	3165.06	2960.26	2788.66	2604.33	2379.04
45.0	4130.98	3995.92	3848.13	3647.75	3491.10	3277.98	3112.48	2938.11	2716.15
90.0	4006.44	3862.52	3658.26	3493.31	3321.71	3161.19	2942.54	2762.09	2583.30
135.0	4163.09	4024.70	3878.02	3677.64	3514.90	3309.54	3137.94	2959.70	2733.86
180.0	4278.22	4115.48	3964.92	3807.17	3647.75	3446.81	3279.65	3112.48	2895.49
225.0	4013.08	3825.99	3669.33	3509.36	3305.11	3150.67	2979.63	2810.80	2588.83
270.0	4154.23	3978.76	3828.20	3624.50	3461.76	3296.81	3131.85	2926.49	2752.68
315.0	3985.96	3796.65	3637.23	3471.17	3309.54	3101.96	2937.56	2772.05	2552.30
360.0	3869.16	3709.74	3543.68	3335.00	3165.06	2960.26	2788.66	2604.33	2379.04

C/γ(°)	18.0	19.0	20.0	21.0	22.0	23.0	24.0	25.0	26.0
0.0	2204.68	2031.98	1864.81	1676.61	1542.10	1415.34	1097.88	1097.88	1039.10
45.0	2539.01	2362.44	2135.49	1966.66	1806.69	1657.78	1491.17	1366.07	1248.72
90.0	2403.95	2178.11	2007.07	1839.34	1655.02	1517.19	1367.73	1102.26	1102.26
135.0	2553.96	2376.83	2159.84	1984.37	1822.74	1674.39	1505.56	1381.57	1266.44
180.0	2719.47	2536.80	2302.10	2116.67	1958.36	1748.01	1596.34	1474.56	1320.13
225.0	2407.27	2179.77	2005.96	1834.92	1683.25	1513.31	1389.32	1095.89	1095.89
270.0	2576.65	2355.79	2171.47	1996.00	1797.83	1648.93	1509.44	1395.96	1247.61
315.0	2366.31	2147.11	1977.73	1814.44	1669.96	1503.35	1384.89	1103.75	1103.75
360.0	2204.68	2031.98	1864.81	1676.61	1542.10	1415.34	1097.88	1097.88	1039.10

C/γ(°)	27.0	28.0	29.0	30.0	31.0	32.0	33.0	34.0	35.0
0.0	921.03	811.59	688.38	598.10	498.40	422.29	351.72	271.56	214.66
45.0	1125.84	975.28	862.91	757.18	637.62	551.82	453.29	379.67	313.25
90.0	1010.65	866.62	760.17	660.65	548.22	467.68	394.78	327.20	253.69
135.0	1149.64	997.42	882.28	775.45	654.22	565.66	464.36	392.96	325.42
180.0	1210.53	1097.05	974.17	833.57	732.27	637.62	545.18	449.97	379.67
225.0	1008.60	894.90	787.07	688.93	575.12	491.98	415.98	332.68	271.90
270.0	1141.89	1021.22	901.10	769.91	670.83	577.84	475.43	400.70	315.46
315.0	1015.74	900.44	792.05	691.37	578.33	497.46	421.35	335.28	274.78
360.0	921.03	811.59	688.38	598.10	498.40	422.29	351.72	271.56	214.66

C/γ(°)	36.0	37.0	38.0	39.0	40.0	41.0	42.0	43.0	44.0
0.0	166.61	118.46	97.03	85.58	78.27	70.30	65.04	60.34	56.35
45.0	283.36	283.36	144.31	112.20	94.38	83.64	76.17	70.30	64.82
90.0	201.21	154.71	118.40	94.21	85.58	75.95	70.02	64.82	59.23
135.0	293.87	293.87	146.91	113.25	95.21	84.36	76.78	70.96	65.70
180.0	299.96	285.02	285.02	145.91	106.72	90.23	81.87	74.34	66.98
225.0	218.48	161.08	125.15	95.98	85.02	77.38	70.80	65.15	59.62
270.0	284.46	284.46	153.99	110.93	92.16	81.65	74.23	66.42	61.33
315.0	218.43	159.53	121.72	93.49	83.03	75.61	69.19	63.82	58.23
360.0	166.61	118.46	97.03	85.58	78.27	70.30	65.04	60.34	56.35

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	51.76	48.38	44.62	41.79	39.30	36.48	34.49	32.66	31.00
45.0	59.28	55.24	51.70	47.38	44.34	40.80	38.30	36.04	34.10
90.0	55.41	51.81	48.49	44.78	42.01	39.58	37.25	34.82	33.05
135.0	60.22	56.29	52.86	48.60	45.50	41.96	39.47	37.14	34.65
180.0	62.22	58.01	53.36	50.04	46.16	43.34	40.74	38.30	35.48
225.0	55.74	52.25	49.04	45.39	42.73	40.19	37.36	34.76	32.99
270.0	57.07	53.36	48.99	45.89	43.01	39.85	37.53	34.87	32.94
315.0	54.41	50.81	46.77	43.84	41.18	38.14	36.04	33.99	31.83
360.0	51.76	48.38	44.62	41.79	39.30	36.48	34.49	32.66	31.00

C/γ(°)	54.0	55.0	56.0	57.0	58.0	59.0	60.0	61.0	62.0
0.0	29.50	27.79	26.63	25.52	24.30	23.36	22.53	21.59	20.87
45.0	31.83	30.22	28.78	27.46	26.02	24.91	23.91	23.03	21.98
90.0	31.33	29.50	28.17	26.96	25.57	24.58	23.41	22.58	21.81
135.0	32.77	31.11	29.56	27.84	26.57	25.52	24.47	23.47	22.42
180.0	33.60	31.77	30.22	28.40	27.18	26.02	24.91	23.75	22.86
225.0	31.33	29.84	28.12	26.90	25.79	24.74	23.64	22.75	21.98
270.0	31.22	29.28	27.90	26.63	25.52	24.24	23.36	22.53	21.75
315.0	30.22	28.78	27.18	26.02	24.96	24.02	22.92	22.14	21.37
360.0	29.50	27.79	26.63	25.52	24.30	23.36	22.53	21.59	20.87

C/γ(°)	63.0	64.0	65.0	66.0	67.0	68.0	69.0	70.0	71.0
0.0	20.20	19.37	18.76	18.21	17.44	16.88	16.33	15.89	15.28
45.0	21.26	20.31	19.71	19.04	18.32	17.71	17.16	16.50	16.00
90.0	21.09	20.43	19.54	18.88	18.21	17.49	16.88	16.38	15.72
135.0	21.64	20.65	19.98	19.32	18.60	17.99	17.44	16.72	16.22
180.0	21.81	21.15	20.43	19.60	18.99	18.38	17.71	17.10	16.61
225.0	21.20	20.37	19.71	19.10	18.38	17.77	17.10	16.55	16.05
270.0	20.87	20.15	19.54	18.82	18.27	17.71	17.05	16.55	16.05
315.0	20.65	19.82	19.21	18.60	17.93	17.38	16.72	16.22	15.78
360.0	20.20	19.37	18.76	18.21	17.44	16.88	16.33	15.89	15.28

C/γ(°)	72.0	73.0	74.0	75.0	76.0	77.0	78.0	79.0	80.0
0.0	14.72	14.34	13.89	13.40	13.01	12.51	12.12	11.73	11.29
45.0	15.50	15.00	14.45	14.00	13.62	13.23	12.68	12.34	11.96
90.0	15.22	14.78	14.23	13.78	13.34	12.84	12.45	12.07	11.68
135.0	15.72	15.22	14.72	14.17	13.73	13.34	12.79	12.40	12.01
180.0	16.11	15.50	15.00	14.56	14.06	13.56	13.12	12.68	12.18
225.0	15.44	14.95	14.45	13.95	13.51	13.01	12.57	12.18	11.79
270.0	15.50	15.06	14.56	14.12	13.56	13.17	12.79	12.34	11.96
315.0	15.17	14.72	14.28	13.78	13.40	12.84	12.45	12.07	11.62
360.0	14.72	14.34	13.89	13.40	13.01	12.51	12.12	11.73	11.29

C/γ(°)	81.0	82.0	83.0	84.0	85.0	86.0	87.0	88.0	89.0
0.0	10.96	10.57	10.30	10.02	9.80	9.58	9.35	9.13	9.02
45.0	11.46	11.13	10.68	10.41	10.13	9.85	9.63	9.41	9.13
90.0	11.24	10.79	10.52	10.24	9.96	9.74	9.52	9.24	9.08
135.0	11.57	11.18	10.68	10.41	10.07	9.85	9.63	9.41	9.19
180.0	11.79	11.40	10.96	10.63	10.30	10.02	9.74	9.52	9.30
225.0	11.35	10.90	10.57	10.30	10.02	9.80	9.58	9.35	9.13
270.0	11.57	11.13	10.74	10.41	10.19	9.85	9.69	9.41	9.24
315.0	11.29	10.85	10.57	10.30	10.02	9.80	9.58	9.35	9.08
360.0	10.96	10.57	10.30	10.02	9.80	9.58	9.35	9.13	9.02

Intensity data(cd)

C/γ(°)	90.0
0.0	9.08
45.0	9.08
90.0	9.13
135.0	9.08
180.0	9.08
225.0	9.08
270.0	9.08
315.0	9.08
360.0	9.08