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NATA

Client:
LumCAT: 2-2643-L Luminaire:
92.70.411.00 Report No: 2023829-B009
Ballast type: AC
Test No: 2023829-C009

LampCAT: LUXEON CoB 1205 LES13	Voltage(V): 34.970
Lamp flux(lm): 1852.5 Number of	Current(A): 0.433
Lamps: 1 Length(mm): 0	Power (W): 15.142
Phm Type: C	PF: 0.000
	Width(mm): 0
	Height(mm): 0

Photometric Results

Lumens(lm): 1745.61, Efficiency(%): 94.23% , Luminous Efficacy(lm/W): 115.28
Central intensity(cd): 10426.630, Maximum intensity(cd): 10426.630
Angle of maximum intensity: C=0.0 γ=0.0
Beam Angle(50%Imax): [C0/180]Total=16.4
[C90/270]Total=16.4
Field angle(10%Imax): [C0/180]Total=43.0
[C90/270]Total=43.0
Maximum s/h(1/2): C0_180=0.28 C90_270=0.28
Maximum s/h(1/4): C0_180=0.31 C90_270=0.31
Up flux rate of lamp(%): 0.00%
Down flux rate of lamp(%): 94.23%
Up flux rate of LUM(%): - -
Down flux rate of LUM(%): 100.00%
CIE Type : Direct lighting
Output flux ratio in π solid angle : 97.897%

Equipment: GMS1980	Date: 2023/8/29	Operator: NT07
Temperature(°C): 25.0	Humidity(%): 60.0%	Distance(m): 7.44

Zonal flux distribution table

γ(°)	Average I(cd)	Zonal F(lm)	Sum F(lm)	Eff Flux(%)	Eff Sum(%)
0.0	10426.626	0.000	0	0.00%	0.00%
1.0	10315.019	9.924	9.924	0.54%	0.57%
2.0	10003.240	29.163	39.087	1.57%	2.24%
3.0	9474.059	46.583	85.67	2.51%	4.91%
4.0	8803.727	61.182	146.852	3.30%	8.41%
5.0	8005.805	72.314	219.166	3.90%	12.56%
6.0	7128.796	79.536	298.702	4.29%	17.11%
7.0	6280.918	83.234	381.936	4.49%	21.88%
8.0	5385.504	83.494	465.43	4.51%	26.66%
9.0	4598.445	80.914	546.345	4.37%	31.30%
10.0	3906.248	76.964	623.309	4.15%	35.71%
11.0	3380.735	72.812	696.121	3.93%	39.88%
12.0	2896.737	68.622	764.743	3.70%	43.81%
13.0	2551.330	64.655	829.398	3.49%	47.51%
14.0	2258.233	61.562	890.96	3.32%	51.04%
15.0	2018.483	58.713	949.672	3.17%	54.40%
16.0	1812.429	56.134	1005.806	3.03%	57.62%
17.0	1627.479	53.569	1059.375	2.89%	60.69%
18.0	1454.969	50.823	1110.197	2.74%	63.60%
19.0	1273.396	47.468	1157.665	2.56%	66.32%
20.0	1186.975	45.032	1202.697	2.43%	68.90%
21.0	1099.634	43.908	1246.605	2.37%	71.41%
22.0	988.145	41.955	1288.559	2.26%	73.82%
23.0	901.274	39.645	1328.204	2.14%	76.09%
24.0	821.842	37.673	1365.878	2.03%	78.25%
25.0	756.725	35.893	1401.771	1.94%	80.30%
26.0	697.386	34.324	1436.096	1.85%	82.27%
27.0	633.259	32.555	1468.65	1.76%	84.13%
28.0	569.609	30.454	1499.104	1.64%	85.88%
29.0	492.557	27.789	1526.893	1.50%	87.47%
30.0	423.261	24.727	1551.62	1.33%	88.89%
31.0	345.047	21.381	1573.001	1.15%	90.11%
32.0	277.633	17.839	1590.84	0.96%	91.13%
33.0	231.440	14.997	1605.838	0.81%	91.99%
34.0	191.676	12.805	1618.643	0.69%	92.73%
35.0	129.666	9.980	1628.622	0.54%	93.30%
36.0	101.837	7.371	1635.993	0.40%	93.72%
37.0	89.666	6.246	1642.239	0.34%	94.08%

Zonal flux distribution table

γ(°)	Average I(cd)	Zonal F(lm)	Sum F(lm)	Eff Flux(%)	Eff Sum(%)
38.0	79.827	5.657	1647.896	0.31%	94.40%
39.0	71.192	5.155	1653.051	0.28%	94.70%
40.0	64.044	4.717	1657.768	0.25%	94.97%
41.0	57.104	4.314	1662.082	0.23%	95.21%
42.0	51.638	3.951	1666.033	0.21%	95.44%
43.0	46.684	3.642	1669.675	0.20%	95.65%
44.0	42.691	3.373	1673.048	0.18%	95.84%
45.0	39.031	3.141	1676.189	0.17%	96.02%
46.0	36.001	2.934	1679.123	0.16%	96.19%
47.0	33.295	2.756	1681.879	0.15%	96.35%
48.0	31.040	2.601	1684.48	0.14%	96.50%
49.0	29.095	2.469	1686.949	0.13%	96.64%
50.0	27.289	2.351	1689.3	0.13%	96.77%
51.0	25.878	2.249	1691.55	0.12%	96.90%
52.0	24.501	2.162	1693.711	0.12%	97.03%
53.0	23.290	2.079	1695.79	0.11%	97.15%
54.0	22.294	2.009	1697.799	0.11%	97.26%
55.0	21.360	1.949	1699.748	0.11%	97.37%
56.0	20.612	1.897	1701.645	0.10%	97.48%
57.0	19.976	1.856	1703.5	0.10%	97.59%
58.0	19.415	1.822	1705.322	0.10%	97.69%
59.0	18.986	1.795	1707.117	0.10%	97.79%
60.0	18.571	1.774	1708.892	0.10%	97.90%
61.0	18.204	1.755	1710.647	0.09%	98.00%
62.0	17.782	1.734	1712.381	0.09%	98.10%
63.0	17.374	1.710	1714.09	0.09%	98.19%
64.0	16.807	1.677	1715.768	0.09%	98.29%
65.0	16.191	1.633	1717.401	0.09%	98.38%
66.0	15.561	1.584	1718.985	0.09%	98.47%
67.0	14.932	1.533	1720.518	0.08%	98.56%
68.0	14.364	1.484	1722.002	0.08%	98.65%
69.0	13.742	1.434	1723.436	0.08%	98.73%
70.0	13.188	1.383	1724.819	0.07%	98.81%
71.0	12.676	1.337	1726.156	0.07%	98.89%
72.0	12.233	1.295	1727.451	0.07%	98.96%
73.0	11.832	1.258	1728.71	0.07%	99.03%
74.0	11.465	1.225	1729.934	0.07%	99.10%
75.0	11.105	1.193	1731.127	0.06%	99.17%

Zonal flux distribution table

γ(°)	Average I(cd)	Zonal F(lm)	Sum F(lm)	Eff Flux(%)	Eff Sum(%)
76.0	10.752	1.160	1732.287	0.06%	99.24%
77.0	10.420	1.129	1733.416	0.06%	99.30%
78.0	10.109	1.099	1734.515	0.06%	99.36%
79.0	9.791	1.069	1735.584	0.06%	99.43%
80.0	9.493	1.040	1736.624	0.06%	99.49%
81.0	9.182	1.010	1737.634	0.05%	99.54%
82.0	8.912	0.981	1738.615	0.05%	99.60%
83.0	8.628	0.954	1739.568	0.05%	99.65%
84.0	8.358	0.925	1740.494	0.05%	99.71%
85.0	8.137	0.900	1741.394	0.05%	99.76%
86.0	7.929	0.878	1742.272	0.05%	99.81%
87.0	7.763	0.859	1743.131	0.05%	99.86%
88.0	7.597	0.841	1743.973	0.05%	99.91%
89.0	7.445	0.824	1744.797	0.04%	99.95%
90.0	7.417	0.815	1745.612	0.04%	100.00%

Zonal flux distribution table

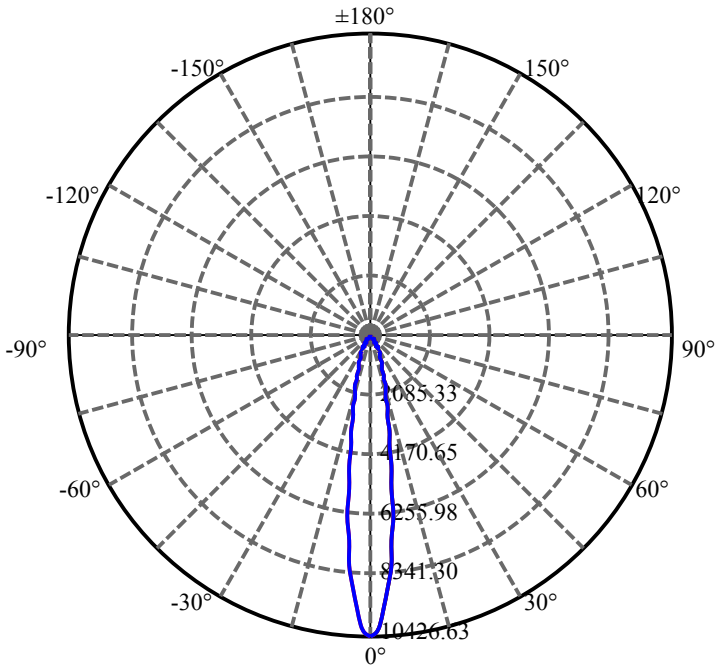
ZONAL LUMEN SUMMARY

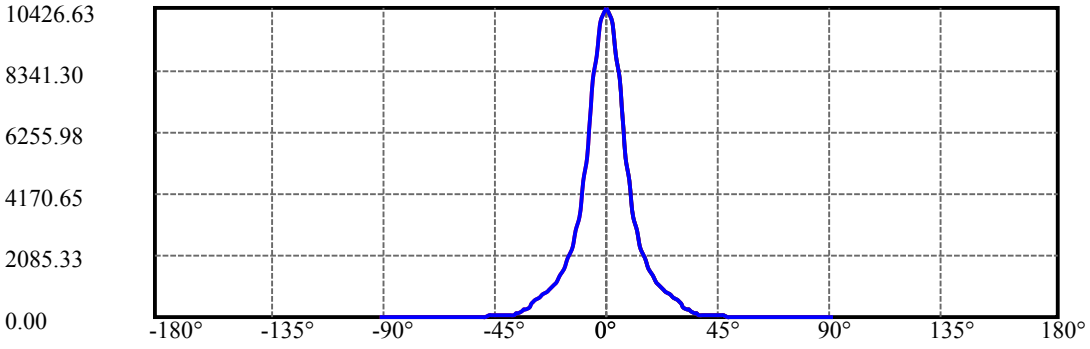
Zone	Lumens	%Lamp	%Fixt
0-30	1551.62	83.76%	88.89%
0-40	1657.77	89.49%	94.97%
0-60	1708.89	92.25%	97.90%
0-90	1744.80	94.18%	99.95%
0-120	1744.80	94.18%	99.95%
0-180	1745.61	94.23%	100.00%
60-90	35.91	1.94%	2.06%
90-120	0.00	0.00%	0.00%
90-130	0.00	0.00%	0.00%
90-150	0.00	0.00%	0.00%
90-180	0.00	0.00%	0.00%
0-24.85	1396.49	75.38%	80.00%

ZONAL LUMEN SUMMARY

0-10	623.31
10-20	579.39
20-30	348.92
30-40	106.15
40-50	31.53
50-60	19.59
60-70	15.93
70-80	11.80
80-90	8.17
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):

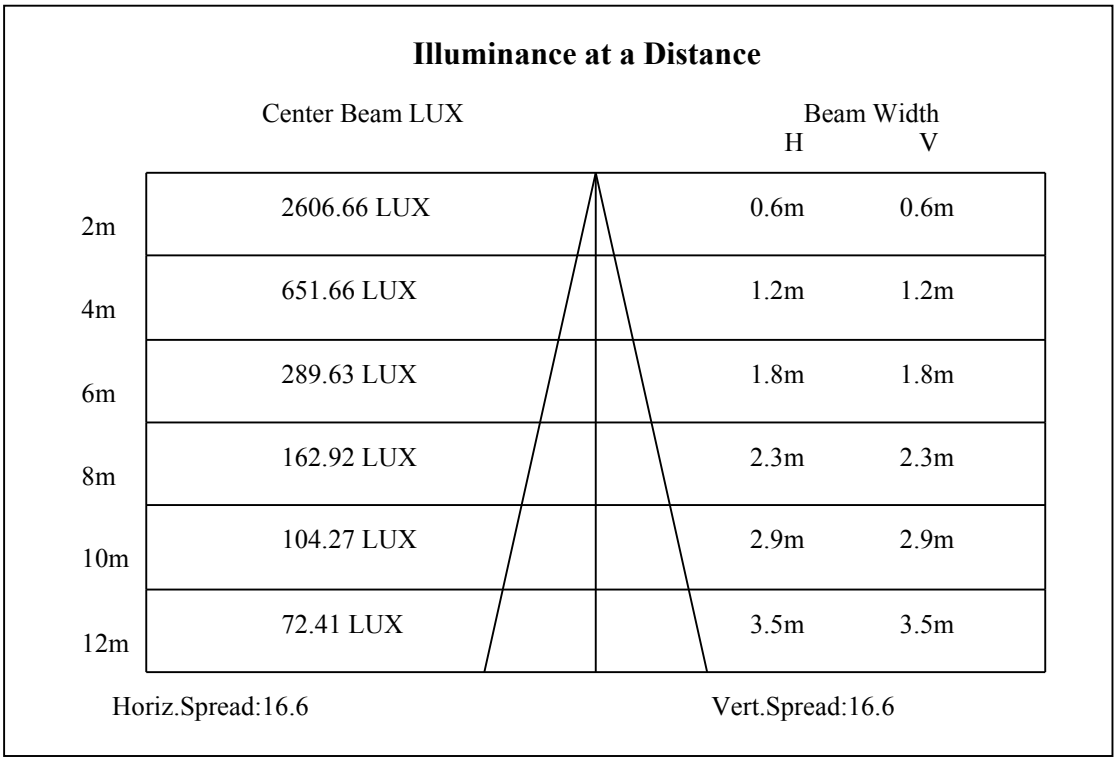
C0/C180:

C90/C270:

Field angle(10%Imax):C0/180Left:21.5 Right:21.5
:C90/270Left:21.5 Right:21.5

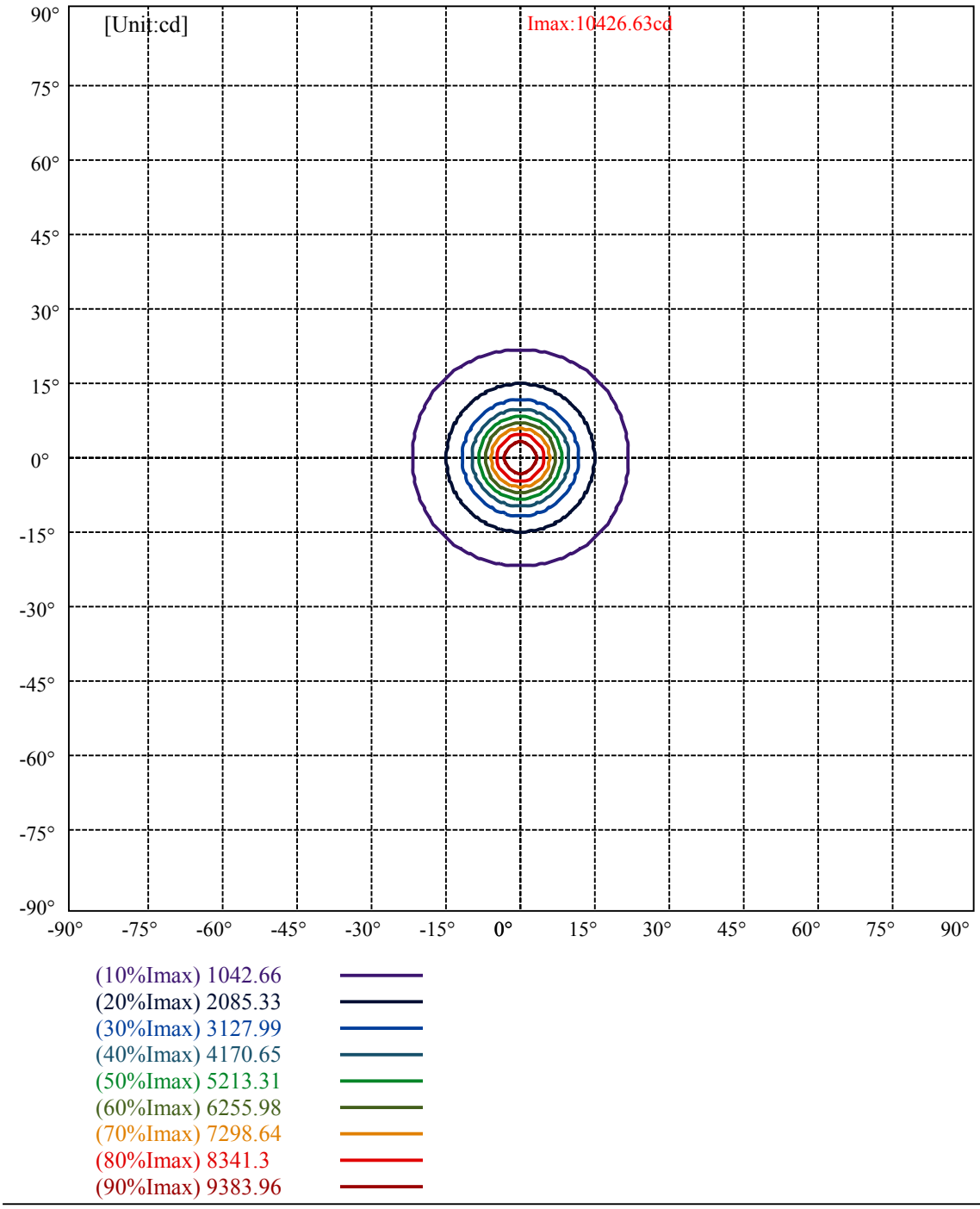
Beam Angle(50%Imax):C0/180Left:8.2 Right:8.2
:C90/270Left:8.2 Right:8.2

Lux distance Curve



Equipment: GMS1980 Date: 2023/8/29 Operator: NT07
Temperature(°C): 25.0 Humidity(%): 60.0% Distance(m): 7.44

ISO-Intensity(V-H)

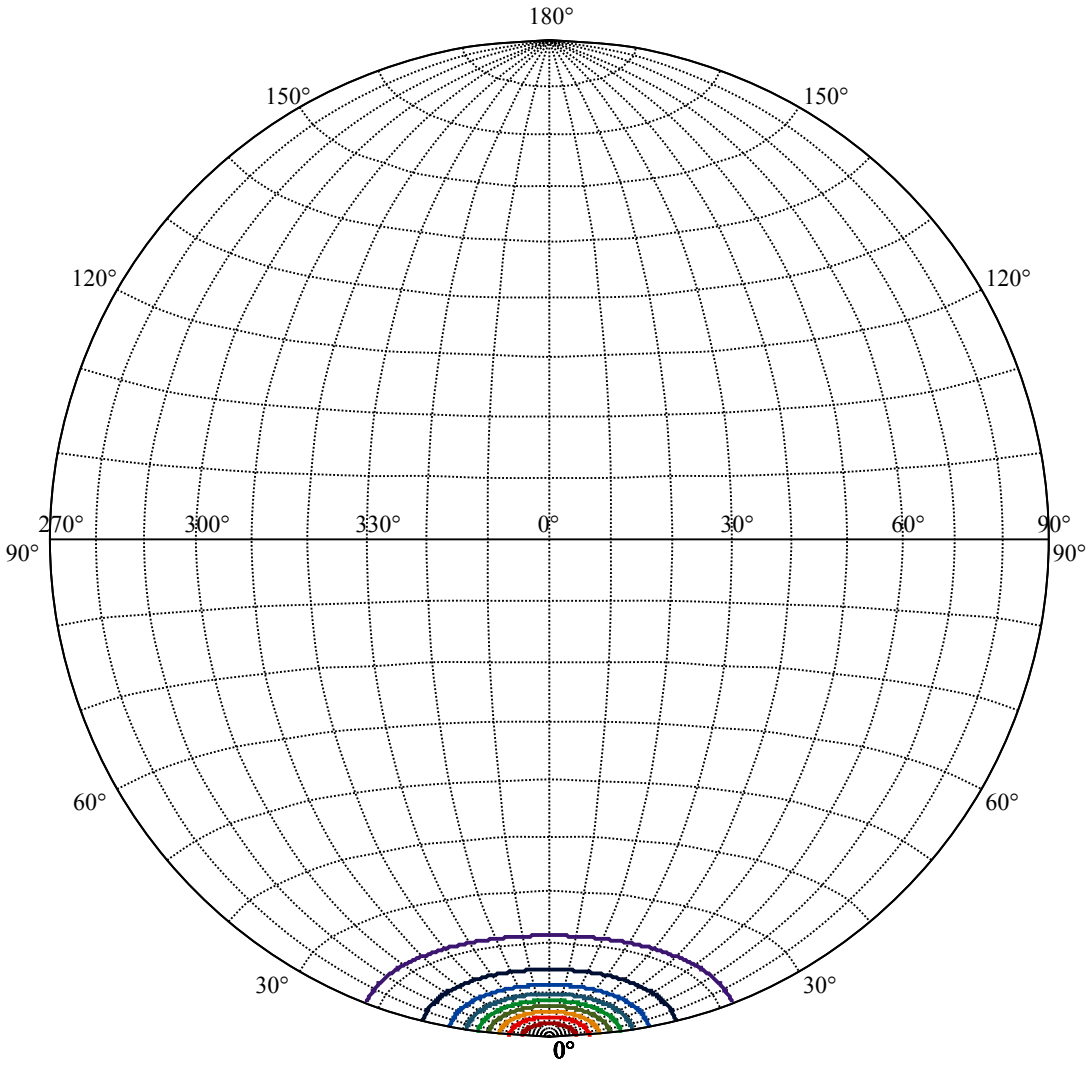


Equipment: GMS1980
Temperature(°C): 25.0

Date: 2023/8/29
Humidity(%): 60.0%

Operator: NT07
Distance(m): 7.44

ISO candela diagram on circular web

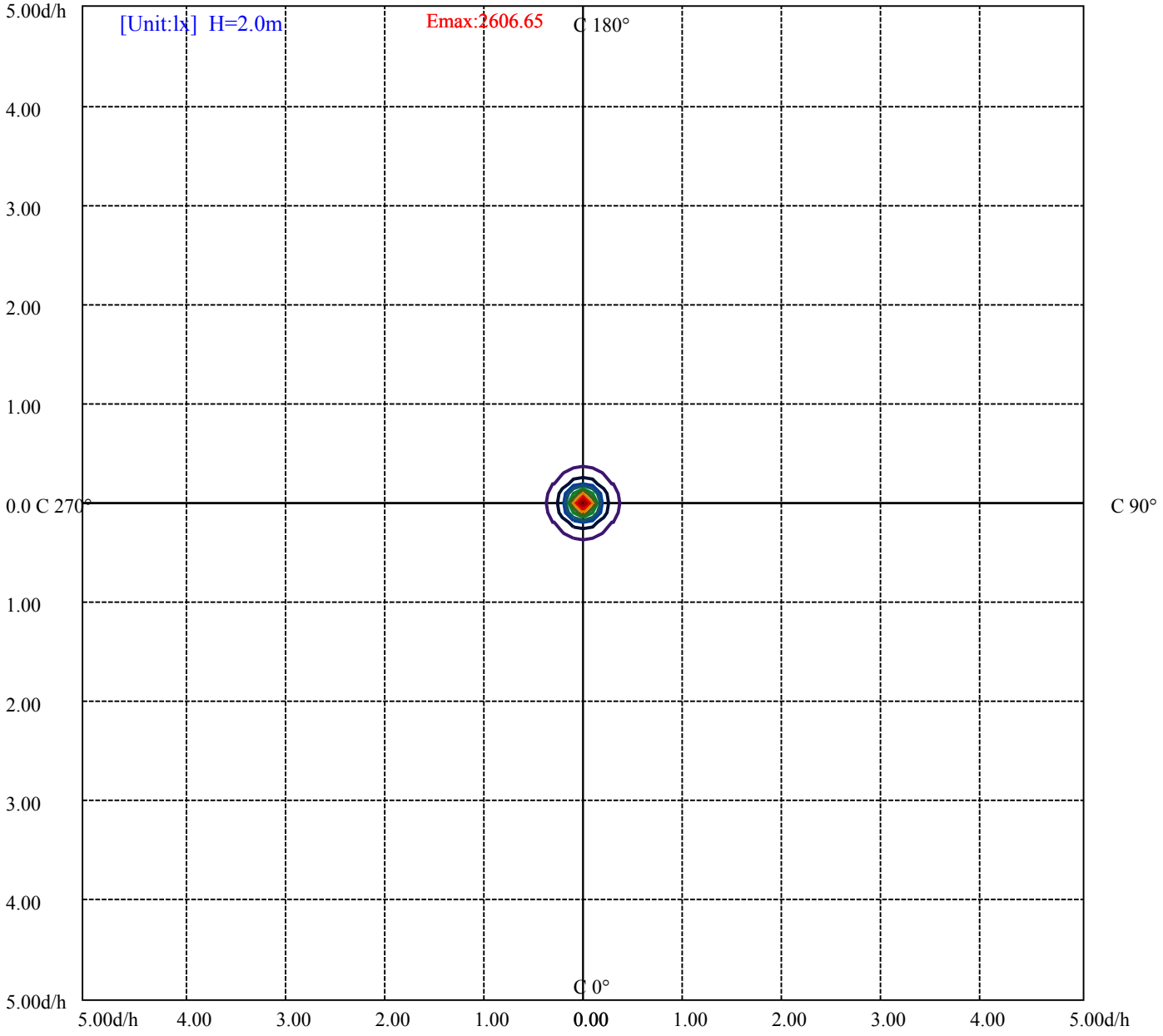


House [Unit:cd] Road

Imax:10426.63

(10%Imax) 1042.66
(20%Imax) 2085.33
(30%Imax) 3127.99
(40%Imax) 4170.65
(50%Imax) 5213.31
(60%Imax) 6255.98
(70%Imax) 7298.64
(80%Imax) 8341.3
(90%Imax) 9383.96

ISO illuminance diagram

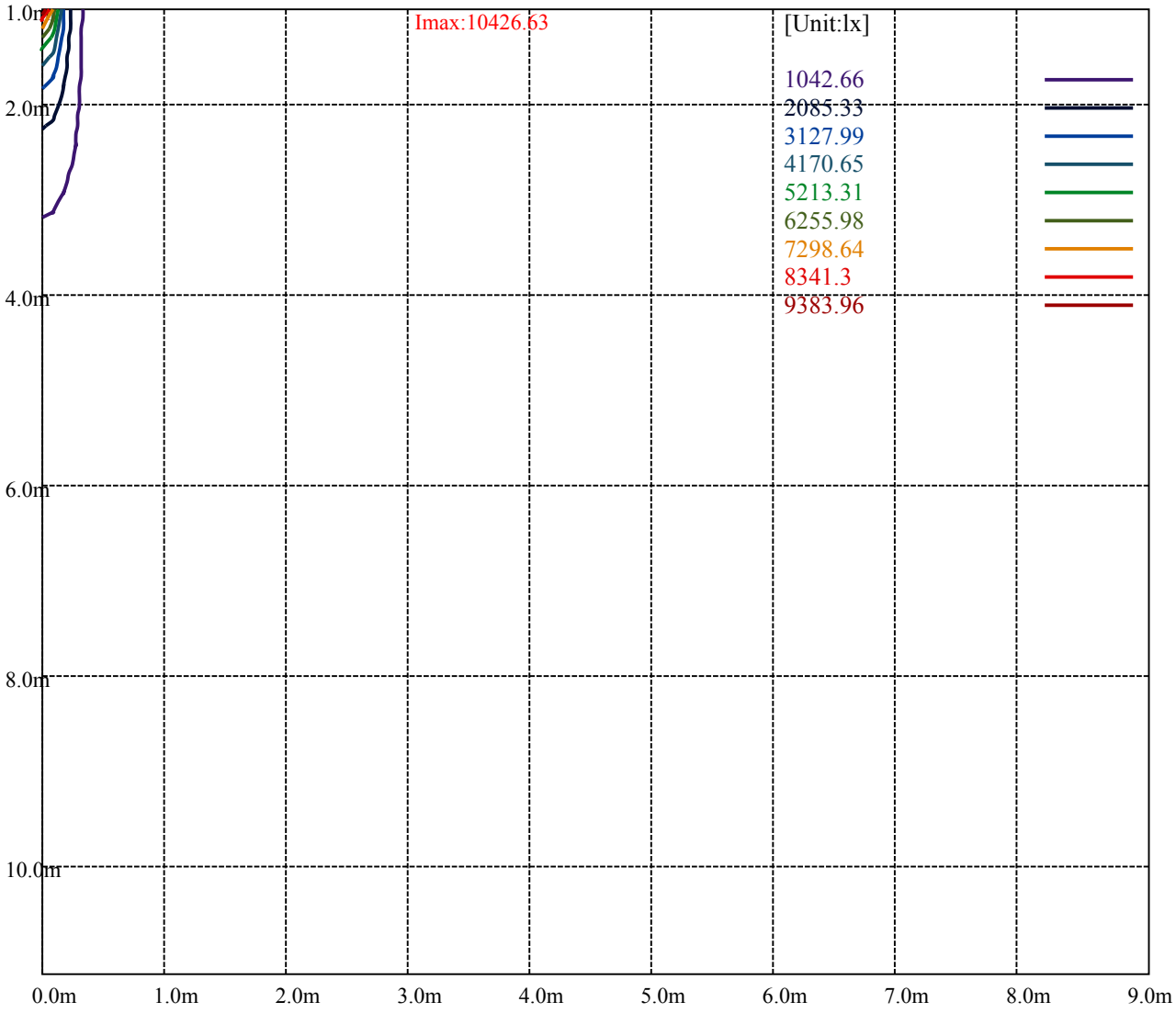


Equipment: GMS1980
Temperature(°C): 25.0

Date: 2023/8/29
Humidity(%): 60.0%

Operator: NT07
Distance(m): 7.44

Space ISO Lux diagram



Equipment: GMS1980
Temperature(°C): 25.0

Date: 2023/8/29
Humidity(%): 60.0%

Operator: NT07
Distance(m): 7.44

Luminance Limitting Curve(no luminous side)

Luminance Table

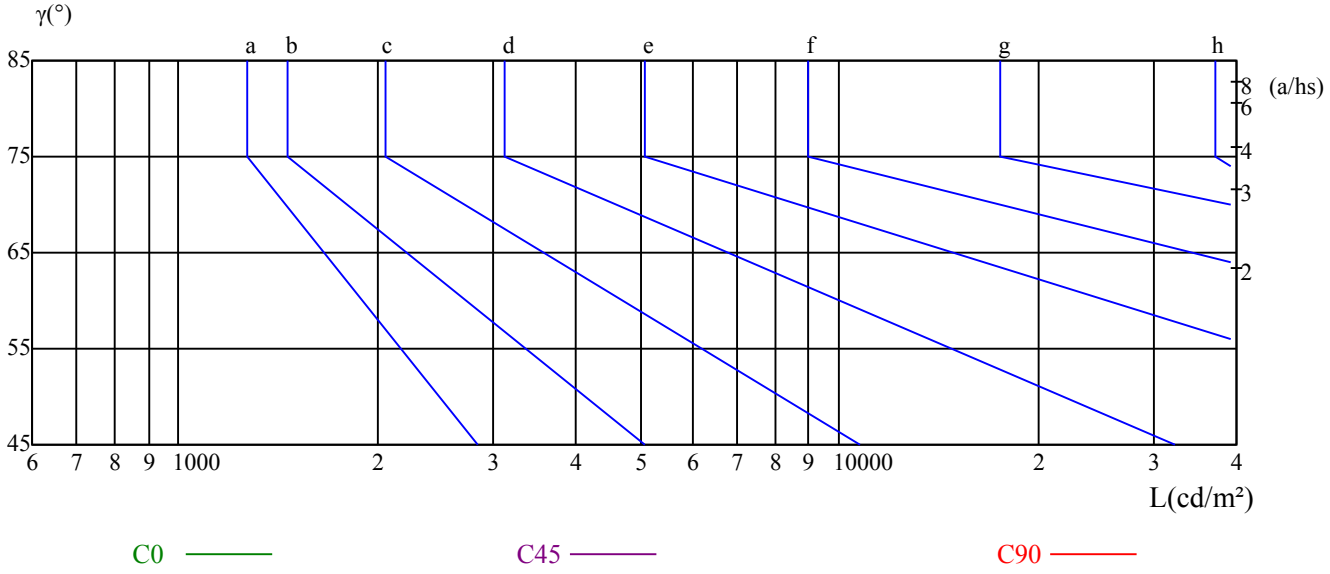
γ	45	50	55	60	65	70	75	80	85
C0	0	0	0	0	0	0	0	0	0
C45	0	0	0	0	0	0	0	0	0
C90	0	0	0	0	0	0	0	0	0

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

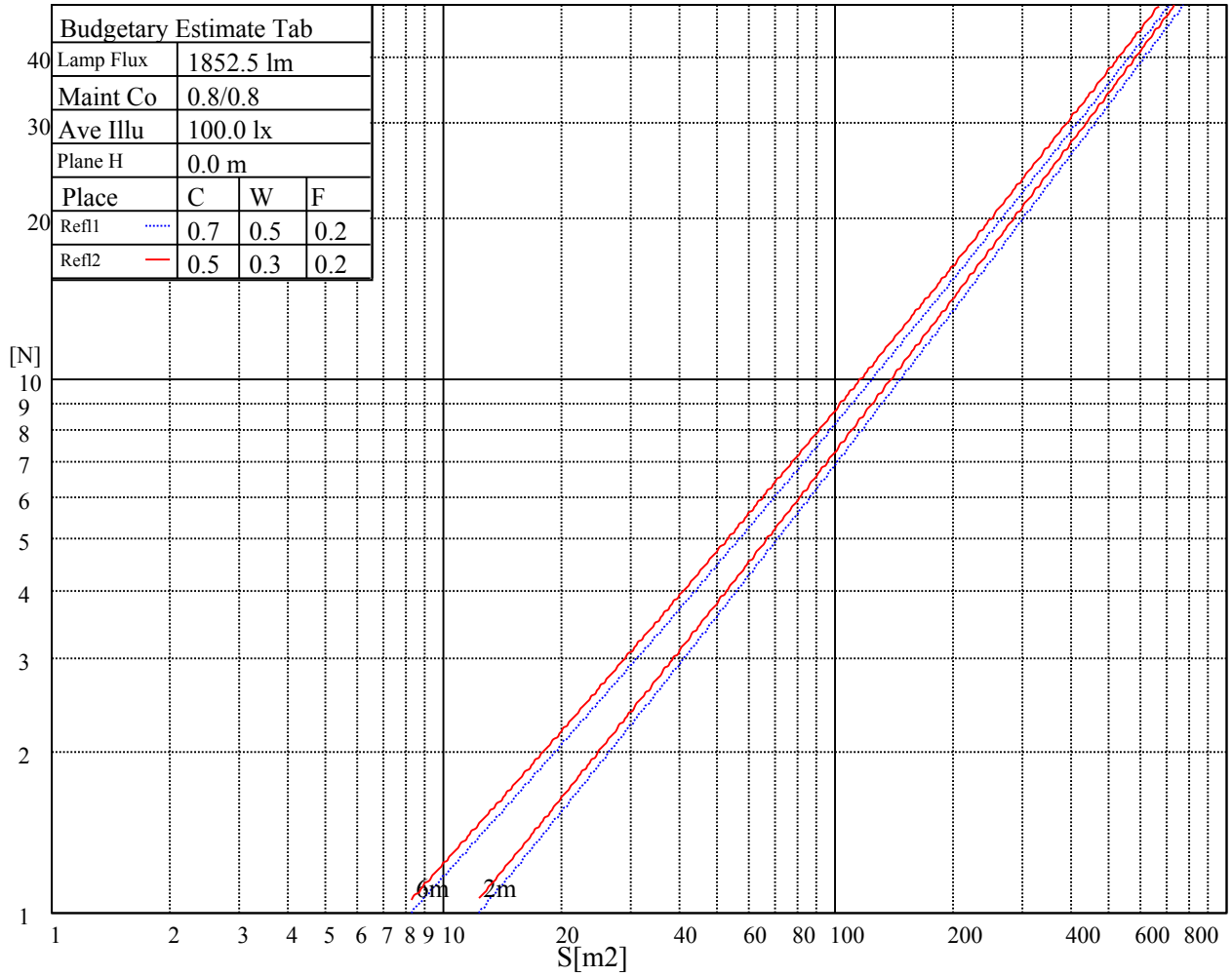


UGR Glare

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

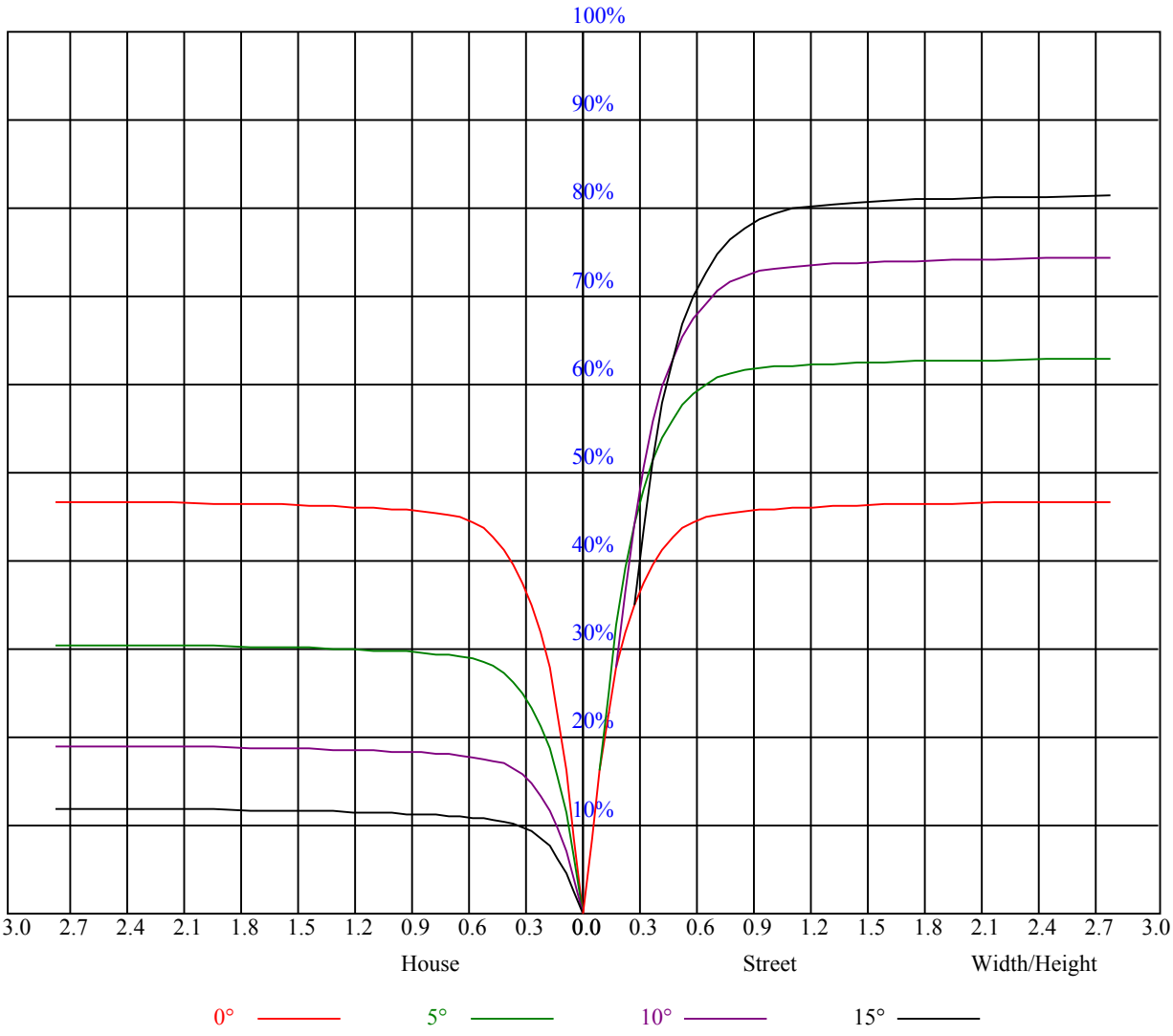


Equipment: GMS1980 Date: 2023/8/29 Operator: NT07
Temperature(°C): 25.0 Humidity(%): 60.0% Distance(m): 7.44

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	1.10	1.10	1.10	1.05	1.05	1.05	1.00	1.00	1.00	0.96	0.96	0.96	0.94
1	1.06	1.04	1.02	1.04	1.02	1.00	1.00	0.98	0.97	0.96	0.95	0.94	0.93	0.92	0.91	0.90
2	1.00	0.97	0.94	0.98	0.96	0.93	0.95	0.93	0.91	0.93	0.91	0.89	0.90	0.89	0.87	0.86
3	0.95	0.91	0.88	0.94	0.90	0.88	0.92	0.89	0.86	0.89	0.87	0.85	0.87	0.85	0.84	0.82
4	0.91	0.87	0.84	0.90	0.86	0.83	0.88	0.85	0.82	0.86	0.84	0.81	0.85	0.82	0.80	0.79
5	0.87	0.83	0.80	0.86	0.82	0.79	0.85	0.81	0.79	0.83	0.80	0.78	0.82	0.80	0.77	0.76
6	0.84	0.80	0.76	0.83	0.79	0.76	0.82	0.78	0.76	0.81	0.78	0.75	0.80	0.77	0.75	0.74
7	0.81	0.77	0.74	0.80	0.76	0.73	0.79	0.76	0.73	0.78	0.75	0.73	0.77	0.75	0.72	0.71
8	0.78	0.74	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
9	0.76	0.72	0.69	0.75	0.71	0.69	0.75	0.71	0.68	0.74	0.71	0.68	0.73	0.70	0.68	0.67
10	0.73	0.69	0.67	0.73	0.69	0.67	0.72	0.69	0.66	0.72	0.69	0.66	0.71	0.68	0.66	0.65

Coefficient Utilization Curve



Equipment: GMS1980	Date: 2023/8/29	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	10243.68	9743.29	9180.89	8485.65	7452.20	6620.79	5824.25	5045.98	4173.05
45.0	10469.52	10396.46	10113.05	9501.94	8816.67	8035.63	7208.64	6384.43	5381.98
90.0	10508.83	10310.11	9839.05	9248.98	8479.56	7432.83	6600.86	5774.43	4774.75
135.0	10484.47	10522.66	10370.44	9892.19	9301.01	8347.82	7511.43	6672.82	5647.12
180.0	10243.68	10436.31	10456.24	10218.22	9819.67	9254.51	8356.68	7536.89	6703.27
225.0	10469.52	10309.55	10006.77	9402.31	8744.15	7986.92	6963.43	6125.37	5313.34
270.0	10508.83	10518.79	10292.39	9822.44	9287.17	8624.04	7853.51	6836.11	6011.35
315.0	10484.47	10282.98	9767.09	9220.75	8529.38	7743.91	6711.57	5871.30	5079.19
360.0	10243.68	9743.29	9180.89	8485.65	7452.20	6620.79	5824.25	5045.98	4173.05

C/γ(°)	9.0	10.0	11.0	12.0	13.0	14.0	15.0	16.0	17.0
0.0	3602.36	3133.51	2768.18	2400.08	2164.82	1907.43	1731.41	1575.86	1407.59
45.0	4625.29	3959.39	3421.90	2898.81	2573.89	2292.69	2013.16	1819.97	1619.59
90.0	4070.09	3370.98	2925.38	2576.65	2297.67	2013.16	1816.65	1648.93	1506.67
135.0	4872.17	4171.39	3590.18	3008.41	2646.40	2353.03	2108.92	1849.31	1678.82
180.0	5673.69	4894.31	4189.11	3596.82	3016.72	2658.58	2367.42	2127.18	1869.79
225.0	4381.18	3767.86	3267.47	2865.60	2542.34	2220.73	1998.21	1810.56	1604.09
270.0	5207.61	4333.58	3728.01	3124.10	2754.89	2446.57	2191.95	1930.68	1749.12
315.0	4355.17	3618.96	3155.65	2703.41	2413.92	2173.68	1920.16	1736.94	1584.16
360.0	3602.36	3133.51	2768.18	2400.08	2164.82	1907.43	1731.41	1575.86	1407.59

C/γ(°)	18.0	19.0	20.0	21.0	22.0	23.0	24.0	25.0	26.0
0.0	1096.39	1096.39	1069.60	945.83	862.52	797.70	744.95	675.76	610.66
45.0	1478.44	1356.11	1238.20	1103.14	1006.27	910.51	815.86	762.16	707.92
90.0	1378.80	1099.21	1099.21	1022.33	905.53	825.82	767.92	704.21	645.42
135.0	1531.58	1367.73	1250.38	1143.00	1023.99	929.33	845.19	768.81	717.88
180.0	1694.32	1505.01	1372.16	1255.92	1129.71	1029.52	927.12	836.34	777.11
225.0	1459.62	1221.05	1084.54	1084.54	959.28	872.43	806.89	752.86	702.16
270.0	1586.38	1449.10	1289.13	1177.87	1077.68	984.69	866.78	805.89	736.15
315.0	1414.23	1092.57	1092.57	1064.45	940.18	860.19	800.03	747.77	681.79
360.0	1096.39	1096.39	1069.60	945.83	862.52	797.70	744.95	675.76	610.66

C/γ(°)	27.0	28.0	29.0	30.0	31.0	32.0	33.0	34.0	35.0
0.0	541.86	474.38	391.02	325.42	244.83	187.04	140.38	107.05	95.93
45.0	647.03	582.26	499.79	433.92	349.23	284.46	284.46	209.18	118.95
90.0	563.50	498.90	430.26	361.46	278.65	218.59	165.18	124.71	99.08
135.0	656.44	592.23	511.41	442.77	374.13	306.60	290.00	215.66	129.86
180.0	726.74	665.85	598.32	516.95	447.20	374.69	287.23	287.23	214.22
225.0	624.50	558.57	491.21	423.84	339.04	273.72	200.10	152.33	118.79
270.0	685.78	628.76	546.28	480.41	411.78	324.32	290.00	290.00	150.40
315.0	620.24	555.92	472.17	401.31	315.52	251.64	194.18	147.24	110.10
360.0	541.86	474.38	391.02	325.42	244.83	187.04	140.38	107.05	95.93

C/γ(°)	36.0	37.0	38.0	39.0	40.0	41.0	42.0	43.0	44.0
0.0	87.07	78.44	68.75	62.11	56.13	51.20	45.56	41.90	38.69
45.0	100.74	88.23	79.21	70.74	63.44	55.58	50.32	45.78	41.68
90.0	89.95	81.15	70.91	64.04	57.90	51.15	46.66	41.74	38.64
135.0	101.96	91.33	82.26	71.85	64.43	56.52	51.20	46.66	42.62
180.0	127.81	102.46	89.73	81.15	73.07	65.59	58.45	52.03	47.27
225.0	98.36	89.01	80.15	70.19	63.21	56.96	51.92	46.39	42.68
270.0	111.70	98.58	88.07	79.54	70.96	62.60	56.63	51.98	46.55
315.0	97.09	88.12	79.54	69.91	63.21	57.24	52.36	47.00	43.40
360.0	87.07	78.44	68.75	62.11	56.13	51.20	45.56	41.90	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	34.93	32.49	30.61	28.29	26.63	24.91	23.69	22.69	21.81
45.0	37.92	34.87	32.11	29.61	27.84	26.35	24.80	23.64	22.58
90.0	35.81	33.10	31.11	29.01	27.29	25.85	24.69	23.41	22.36
135.0	38.58	35.70	32.99	30.89	28.84	27.12	25.68	24.36	23.25
180.0	43.12	40.02	36.04	33.54	31.61	29.34	27.62	26.13	24.58
225.0	39.58	36.59	33.49	31.66	29.67	27.51	26.18	24.52	23.30
270.0	43.07	38.97	36.26	33.93	31.39	29.39	27.84	26.46	24.74
315.0	39.25	36.26	33.77	31.39	29.50	27.84	26.51	24.80	23.69
360.0	34.93	32.49	30.61	28.29	26.63	24.91	23.69	22.69	21.81

C/γ(°)	54.0	55.0	56.0	57.0	58.0	59.0	60.0	61.0	62.0
0.0	21.09	20.15	19.54	19.10	18.65	18.27	17.93	17.77	17.16
45.0	21.48	20.76	20.09	19.60	18.99	18.65	18.27	17.93	17.55
90.0	21.53	20.65	19.93	19.21	18.88	18.60	18.10	17.77	17.44
135.0	22.25	21.31	20.65	20.04	19.32	18.93	18.65	18.21	17.82
180.0	23.30	22.09	21.20	20.59	19.82	19.15	18.82	18.49	17.99
225.0	22.36	21.31	20.54	19.93	19.43	18.99	18.49	18.05	17.71
270.0	23.58	22.69	21.92	20.98	20.26	19.82	19.37	18.82	18.38
315.0	22.75	21.92	21.03	20.37	19.98	19.48	18.93	18.60	18.21
360.0	21.09	20.15	19.54	19.10	18.65	18.27	17.93	17.77	17.16

C/γ(°)	63.0	64.0	65.0	66.0	67.0	68.0	69.0	70.0	71.0
0.0	16.55	15.94	15.28	14.67	14.00	13.45	12.90	12.45	11.96
45.0	17.27	16.83	16.16	15.67	14.89	14.39	13.89	13.28	12.68
90.0	16.94	16.38	15.78	15.17	14.61	14.12	13.40	12.90	12.40
135.0	17.60	17.05	16.50	15.89	15.28	14.72	14.12	13.51	13.01
180.0	17.66	17.33	16.77	16.22	15.55	14.95	14.23	13.73	13.12
225.0	17.33	16.61	16.05	15.33	14.78	14.23	13.51	13.01	12.57
270.0	18.05	17.44	16.72	16.00	15.39	14.78	14.23	13.51	13.01
315.0	17.60	16.88	16.27	15.55	14.95	14.28	13.67	13.12	12.68
360.0	16.55	15.94	15.28	14.67	14.00	13.45	12.90	12.45	11.96

C/γ(°)	72.0	73.0	74.0	75.0	76.0	77.0	78.0	79.0	80.0
0.0	11.62	11.29	10.96	10.68	10.30	10.02	9.63	9.35	9.08
45.0	12.29	11.90	11.51	11.13	10.79	10.46	10.13	9.85	9.52
90.0	12.01	11.68	11.29	10.96	10.63	10.24	9.96	9.63	9.35
135.0	12.45	12.07	11.73	11.29	11.02	10.63	10.35	10.02	9.74
180.0	12.57	12.18	11.79	11.40	11.02	10.68	10.41	10.07	9.80
225.0	12.12	11.62	11.29	10.96	10.57	10.24	9.96	9.69	9.35
270.0	12.57	12.07	11.68	11.35	10.96	10.63	10.35	9.96	9.63
315.0	12.23	11.85	11.46	11.07	10.74	10.46	10.07	9.74	9.47
360.0	11.62	11.29	10.96	10.68	10.30	10.02	9.63	9.35	9.08

C/γ(°)	81.0	82.0	83.0	84.0	85.0	86.0	87.0	88.0	89.0
0.0	8.75	8.52	8.30	8.03	7.86	7.69	7.53	7.31	7.47
45.0	9.24	8.97	8.58	8.36	8.14	7.92	7.75	7.58	7.42
90.0	9.02	8.80	8.58	8.30	8.14	7.92	7.75	7.64	7.42
135.0	9.41	9.08	8.80	8.52	8.25	8.03	7.86	7.69	7.58
180.0	9.47	9.19	8.91	8.58	8.30	8.08	7.92	7.69	7.53
225.0	9.08	8.80	8.52	8.25	8.03	7.86	7.69	7.53	7.31
270.0	9.35	9.08	8.75	8.52	8.30	8.08	7.86	7.69	7.47
315.0	9.13	8.86	8.58	8.30	8.08	7.86	7.75	7.64	7.36
360.0	8.75	8.52	8.30	8.03	7.86	7.69	7.53	7.31	7.47

Intensity data(cd)

C/γ(°)	90.0
0.0	7.42
45.0	7.42
90.0	7.47
135.0	7.42
180.0	7.36
225.0	7.31
270.0	7.42
315.0	7.53
360.0	7.42