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: 2-2644-L
Luminaire: 92.70.429.00
Report No: 20231010-B011
Ballast type: AC

Test No: 20231010-C011	Voltage(V): 35.910
LampCAT: CREE CXA1830 LES14	Current(A): 0.530
Lamp flux(lm): 1997.0	Power (W): 19.032
Number of Lamps: 1	PF: 0.000
Length(mm): 0	Width(mm): 0
Phm Type: C	Height(mm): 0

Photometric Results

Lumens(lm): 1848.18, Efficiency(%): 92.55% , Luminous Efficacy(lm/W): 97.11
Central intensity(cd): 6545.923, Maximum intensity(cd): 6545.923
Angle of maximum intensity: C=0.0 γ=0.0
Beam Angle(50%Imax): [C0/180]Total=25.2
[C90/270]Total=25.2
Field angle(10%Imax): [C0/180]Total=55.8
[C90/270]Total=55.8
Maximum s/h(1/2): C0_180=0.42 C90_270=0.42
Maximum s/h(1/4): C0_180=0.45 C90_270=0.45
Up flux rate of lamp(%): 0.00%
Down flux rate of lamp(%): 92.55%
Up flux rate of LUM(%): - -
Down flux rate of LUM(%): 100.00%
CIE Type : Direct lighting
Output flux ratio in π solid angle : 97.989%

Zonal flux distribution table

γ(°)	Average I(cd)	Zonal F(lm)	Sum F(lm)	Eff Flux(%)	Eff Sum(%)
0.0	6545.923	0.000	0	0.00%	0.00%
1.0	6517.139	6.250	6.25	0.31%	0.34%
2.0	6426.774	18.578	24.829	0.93%	1.34%
3.0	6283.478	30.399	55.228	1.52%	2.99%
4.0	6103.648	41.464	96.691	2.08%	5.23%
5.0	5869.018	51.506	148.197	2.58%	8.02%
6.0	5606.503	60.307	208.504	3.02%	11.28%
7.0	5293.202	67.654	276.158	3.39%	14.94%
8.0	4963.917	73.408	349.566	3.68%	18.91%
9.0	4587.167	77.406	426.973	3.88%	23.10%
10.0	4197.685	79.500	506.472	3.98%	27.40%
11.0	3831.798	80.231	586.703	4.02%	31.74%
12.0	3457.676	79.684	666.388	3.99%	36.06%
13.0	3122.580	78.091	744.479	3.91%	40.28%
14.0	2812.323	75.966	820.445	3.80%	44.39%
15.0	2534.378	73.402	893.847	3.68%	48.36%
16.0	2270.273	70.402	964.249	3.53%	52.17%
17.0	2052.871	67.323	1031.572	3.37%	55.82%
18.0	1845.572	64.277	1095.848	3.22%	59.29%
19.0	1668.302	61.134	1156.983	3.06%	62.60%
20.0	1475.589	57.542	1214.525	2.88%	65.71%
21.0	1314.773	53.581	1268.105	2.68%	68.61%
22.0	1187.611	50.286	1318.392	2.52%	71.33%
23.0	1098.631	47.972	1366.363	2.40%	73.93%
24.0	996.386	45.805	1412.168	2.29%	76.41%
25.0	908.782	43.319	1455.487	2.17%	78.75%
26.0	823.876	40.900	1496.387	2.05%	80.97%
27.0	733.857	38.110	1534.497	1.91%	83.03%
28.0	643.403	34.869	1569.366	1.75%	84.91%
29.0	558.020	31.433	1600.799	1.57%	86.61%
30.0	476.823	27.941	1628.739	1.40%	88.13%
31.0	388.783	24.089	1652.828	1.21%	89.43%
32.0	316.865	20.216	1673.044	1.01%	90.52%
33.0	256.993	16.906	1689.95	0.85%	91.44%
34.0	226.286	14.625	1704.575	0.73%	92.23%
35.0	162.996	12.090	1716.665	0.61%	92.88%
36.0	120.588	9.029	1725.694	0.45%	93.37%
37.0	104.950	7.356	1733.05	0.37%	93.77%

Zonal flux distribution table

γ(°)	Average I(cd)	Zonal F(lm)	Sum F(lm)	Eff Flux(%)	Eff Sum(%)
38.0	93.804	6.634	1739.684	0.33%	94.13%
39.0	84.470	6.085	1745.769	0.30%	94.46%
40.0	76.104	5.600	1751.37	0.28%	94.76%
41.0	68.721	5.157	1756.527	0.26%	95.04%
42.0	61.858	4.744	1761.271	0.24%	95.30%
43.0	56.419	4.381	1765.652	0.22%	95.53%
44.0	51.230	4.063	1769.715	0.20%	95.75%
45.0	46.871	3.770	1773.485	0.19%	95.96%
46.0	42.858	3.509	1776.994	0.18%	96.15%
47.0	39.370	3.270	1780.265	0.16%	96.33%
48.0	36.437	3.065	1783.329	0.15%	96.49%
49.0	33.828	2.885	1786.215	0.14%	96.65%
50.0	31.524	2.725	1788.939	0.14%	96.79%
51.0	29.552	2.584	1791.524	0.13%	96.93%
52.0	27.884	2.465	1793.988	0.12%	97.07%
53.0	26.480	2.365	1796.353	0.12%	97.20%
54.0	25.220	2.279	1798.632	0.11%	97.32%
55.0	24.279	2.210	1800.841	0.11%	97.44%
56.0	23.311	2.150	1802.992	0.11%	97.55%
57.0	22.439	2.092	1805.084	0.10%	97.67%
58.0	21.574	2.035	1807.119	0.10%	97.78%
59.0	20.751	1.979	1809.098	0.10%	97.89%
60.0	19.844	1.918	1811.015	0.10%	97.99%
61.0	18.945	1.851	1812.867	0.09%	98.09%
62.0	18.128	1.786	1814.653	0.09%	98.19%
63.0	17.340	1.725	1816.378	0.09%	98.28%
64.0	16.599	1.665	1818.043	0.08%	98.37%
65.0	15.949	1.611	1819.654	0.08%	98.46%
66.0	15.298	1.559	1821.213	0.08%	98.54%
67.0	14.766	1.512	1822.725	0.08%	98.62%
68.0	14.233	1.469	1824.194	0.07%	98.70%
69.0	13.714	1.426	1825.619	0.07%	98.78%
70.0	13.243	1.384	1827.004	0.07%	98.85%
71.0	12.787	1.345	1828.349	0.07%	98.93%
72.0	12.358	1.307	1829.657	0.07%	99.00%
73.0	11.936	1.270	1830.927	0.06%	99.07%
74.0	11.555	1.235	1832.162	0.06%	99.13%
75.0	11.188	1.202	1833.364	0.06%	99.20%

Zonal flux distribution table

γ(°)	Average I(cd)	Zonal F(lm)	Sum F(lm)	Eff Flux(%)	Eff Sum(%)
76.0	10.856	1.170	1834.534	0.06%	99.26%
77.0	10.503	1.139	1835.673	0.06%	99.32%
78.0	10.227	1.110	1836.782	0.06%	99.38%
79.0	9.915	1.082	1837.865	0.05%	99.44%
80.0	9.645	1.055	1838.919	0.05%	99.50%
81.0	9.396	1.030	1839.949	0.05%	99.55%
82.0	9.133	1.005	1840.954	0.05%	99.61%
83.0	8.863	0.978	1841.932	0.05%	99.66%
84.0	8.642	0.954	1842.886	0.05%	99.71%
85.0	8.421	0.931	1843.817	0.05%	99.76%
86.0	8.199	0.908	1844.725	0.05%	99.81%
87.0	8.012	0.887	1845.613	0.04%	99.86%
88.0	7.846	0.869	1846.481	0.04%	99.91%
89.0	7.729	0.854	1847.335	0.04%	99.95%
90.0	7.687	0.845	1848.18	0.04%	100.00%

Zonal flux distribution table

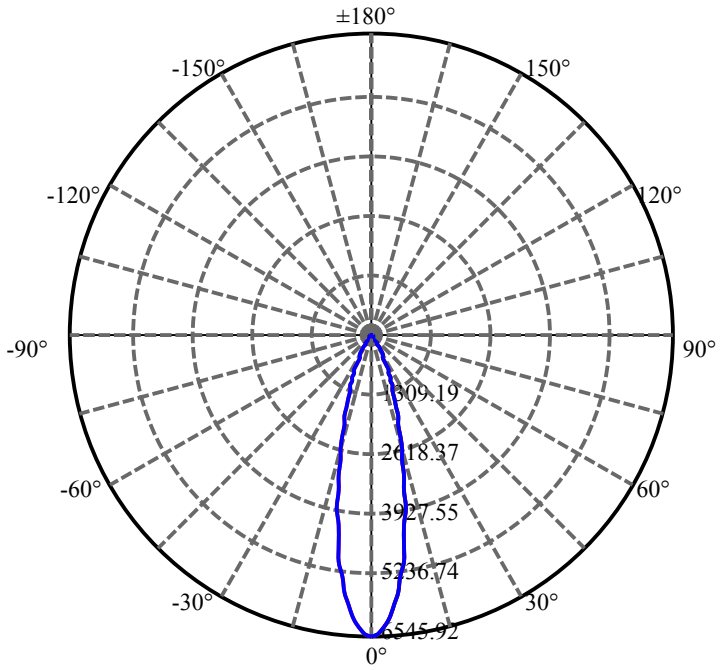
ZONAL LUMEN SUMMARY

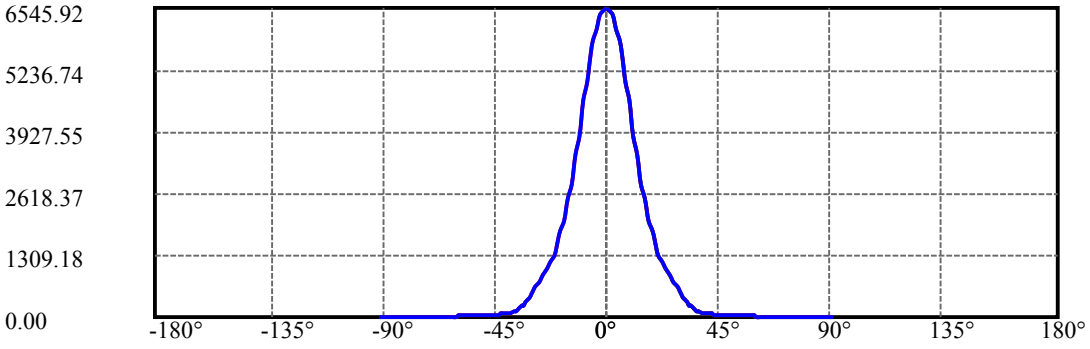
Zone	Lumens	%Lamp	%Fixt
0-30	1628.74	81.56%	88.13%
0-40	1751.37	87.70%	94.76%
0-60	1811.02	90.69%	97.99%
0-90	1847.34	92.50%	99.95%
0-120	1847.34	92.50%	99.95%
0-180	1848.18	92.55%	100.00%
60-90	36.32	1.82%	1.97%
90-120	0.00	0.00%	0.00%
90-130	0.00	0.00%	0.00%
90-150	0.00	0.00%	0.00%
90-180	0.00	0.00%	0.00%
0-25.56	1478.54	74.04%	80.00%

ZONAL LUMEN SUMMARY

0-10	506.47
10-20	708.05
20-30	414.21
30-40	122.63
40-50	37.57
50-60	22.08
60-70	15.99
70-80	11.92
80-90	8.42
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):

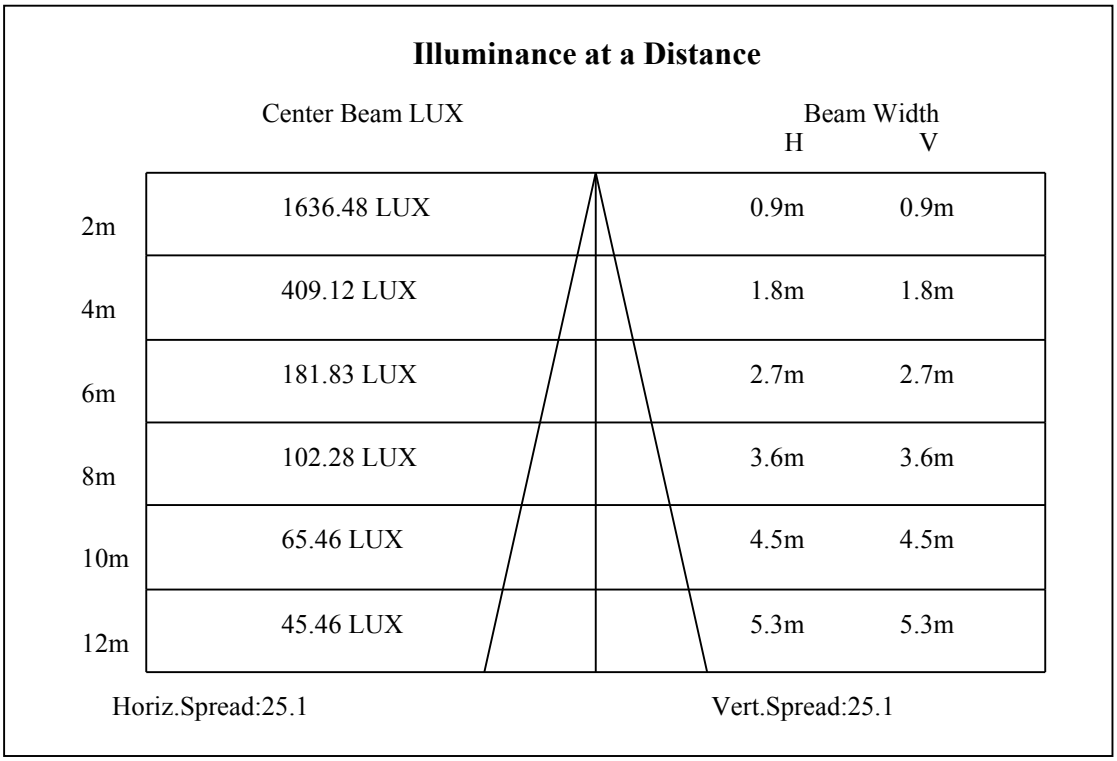
C0/C180:

C90/C270:

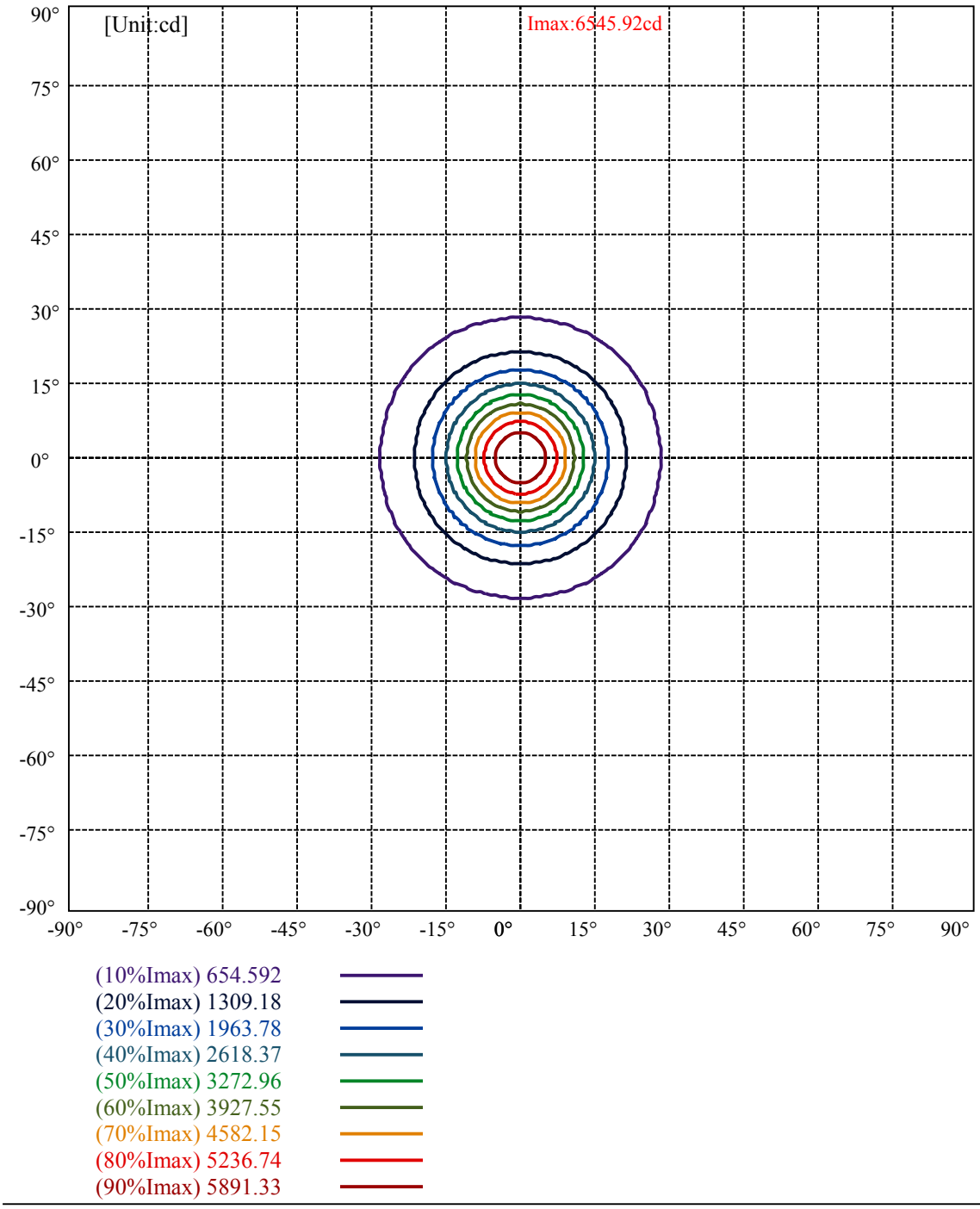
Field angle(10%Imax):C0/180Left:27.9 Right:27.9
:C90/270Left:27.9 Right:27.9

Beam Angle(50%Imax):C0/180Left:12.6 Right:12.6
:C90/270Left:12.6 Right:12.6

Lux distance Curve



ISO-Intensity(V-H)

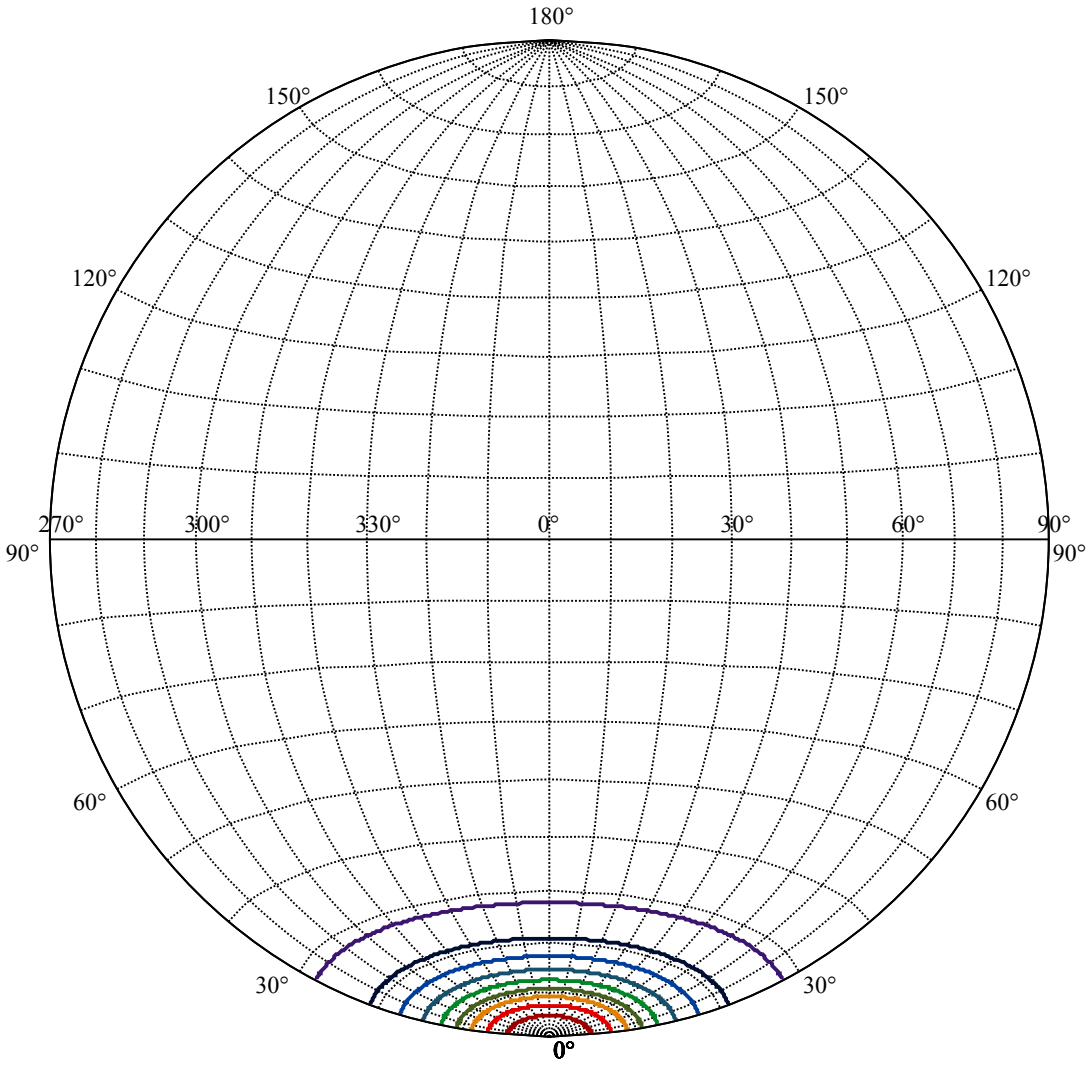


Equipment: GMS1980
Temperature(°C): 25.0

Date: 2023/10/10
Humidity(%): 60.0%

Operator: NT07
Distance(m): 7.44

ISO candela diagram on circular web



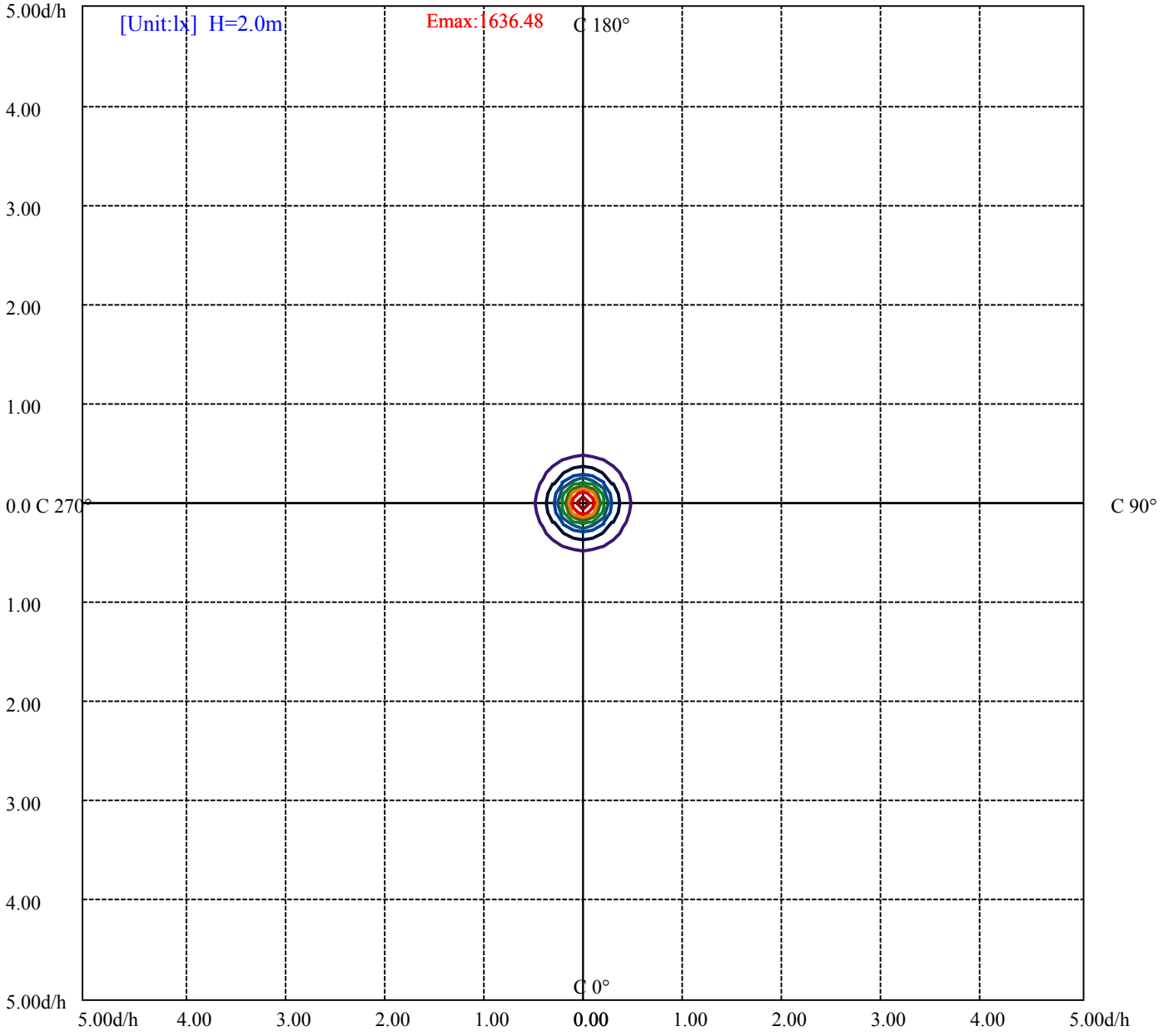
House [Unit:cd] Road

Imax:6545.92

(10%Imax) 654.592
(20%Imax) 1309.18
(30%Imax) 1963.78
(40%Imax) 2618.37
(50%Imax) 3272.96
(60%Imax) 3927.55
(70%Imax) 4582.15
(80%Imax) 5236.74
(90%Imax) 5891.33

Equipment: GMS1980 Date: 2023/10/10 Operator: NT07
Temperature(°C): 25.0 Humidity(%): 60.0% Distance(m): 7.44

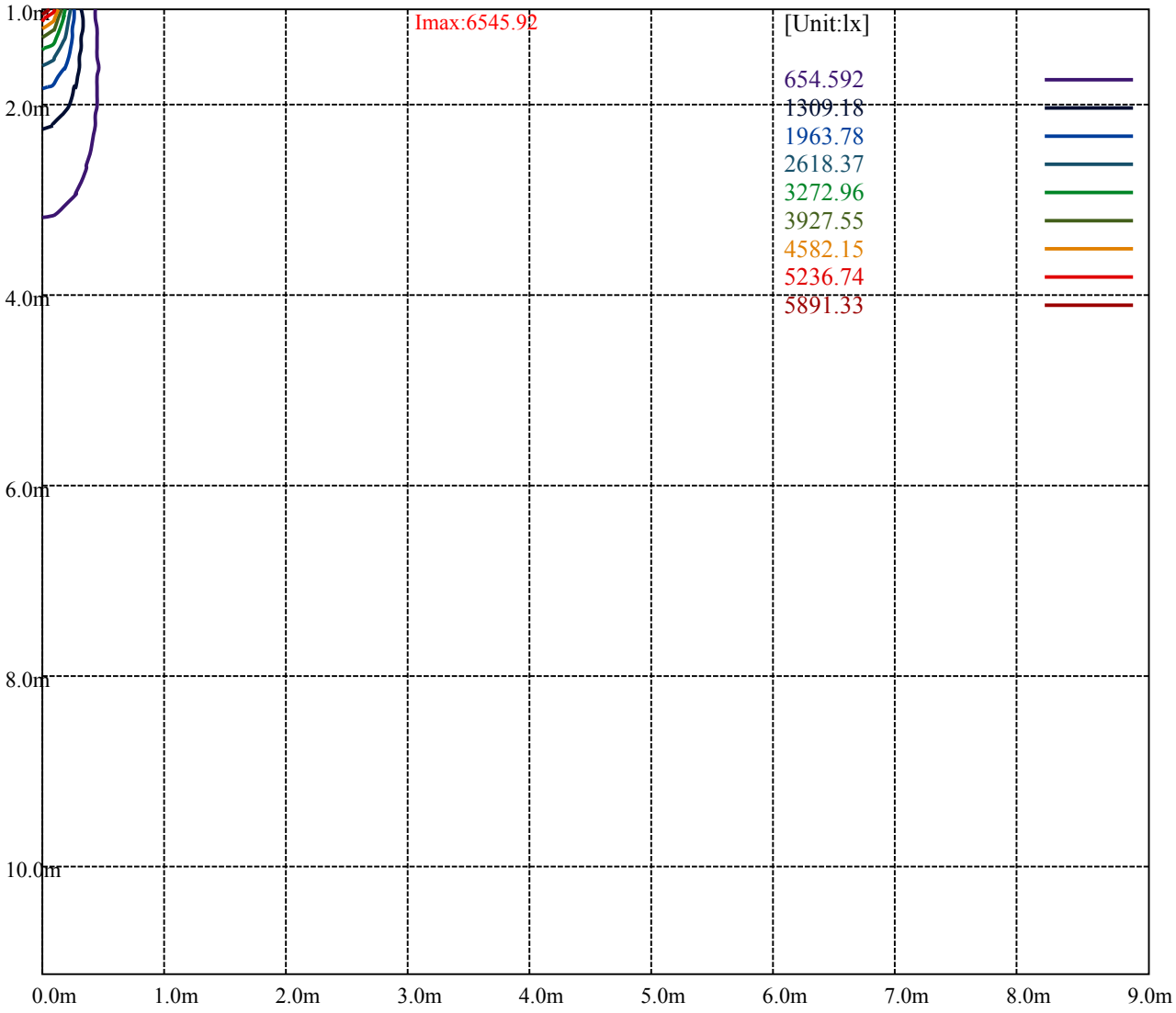
ISO illuminance diagram



(10%Emax) 163.648
(20%Emax) 327.295
(30%Emax) 490.945
(40%Emax) 654.5925
(50%Emax) 818.24
(60%Emax) 981.8875
(70%Emax) 1145.535
(80%Emax) 1309.182
(90%Emax) 1472.833

Equipment: GMS1980
Temperature(°C): 25.0
Date: 2023/10/10
Humidity(%): 60.0%
Operator: NT07
Distance(m): 7.44

Space ISO Lux diagram



Equipment: GMS1980
Temperature(°C): 25.0

Date: 2023/10/10
Humidity(%): 60.0%

Operator: NT07
Distance(m): 7.44

Luminance Limitting Curve(no luminous side)

Luminance Table

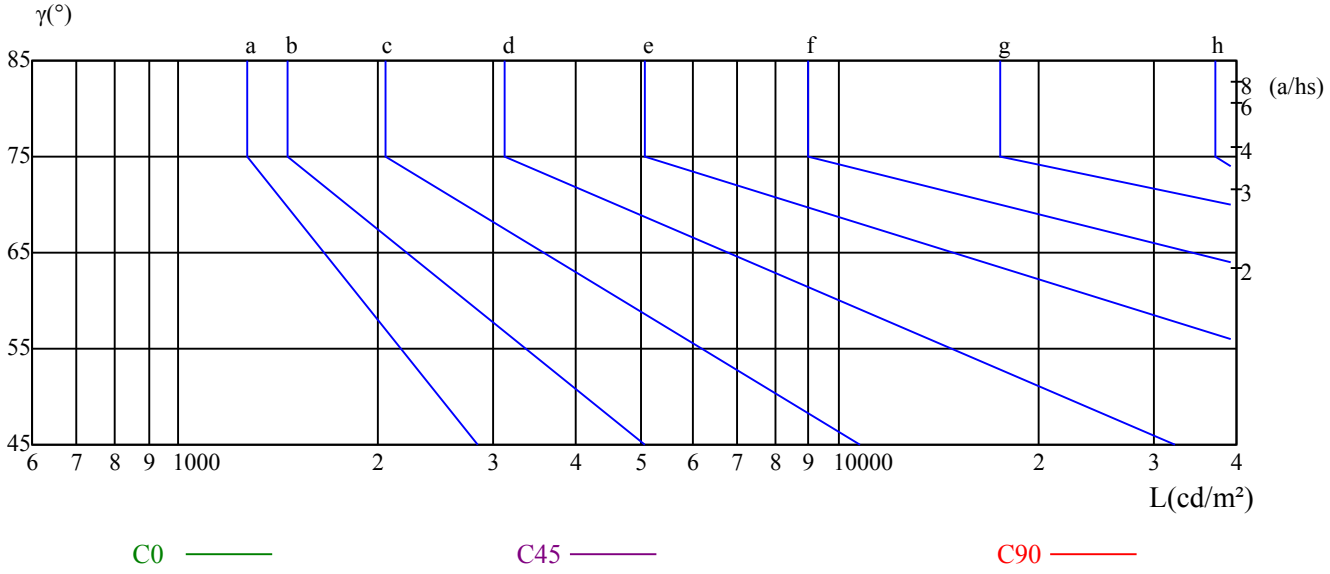
γ	45	50	55	60	65	70	75	80	85
C0	0	0	0	0	0	0	0	0	0
C45	0	0	0	0	0	0	0	0	0
C90	0	0	0	0	0	0	0	0	0

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

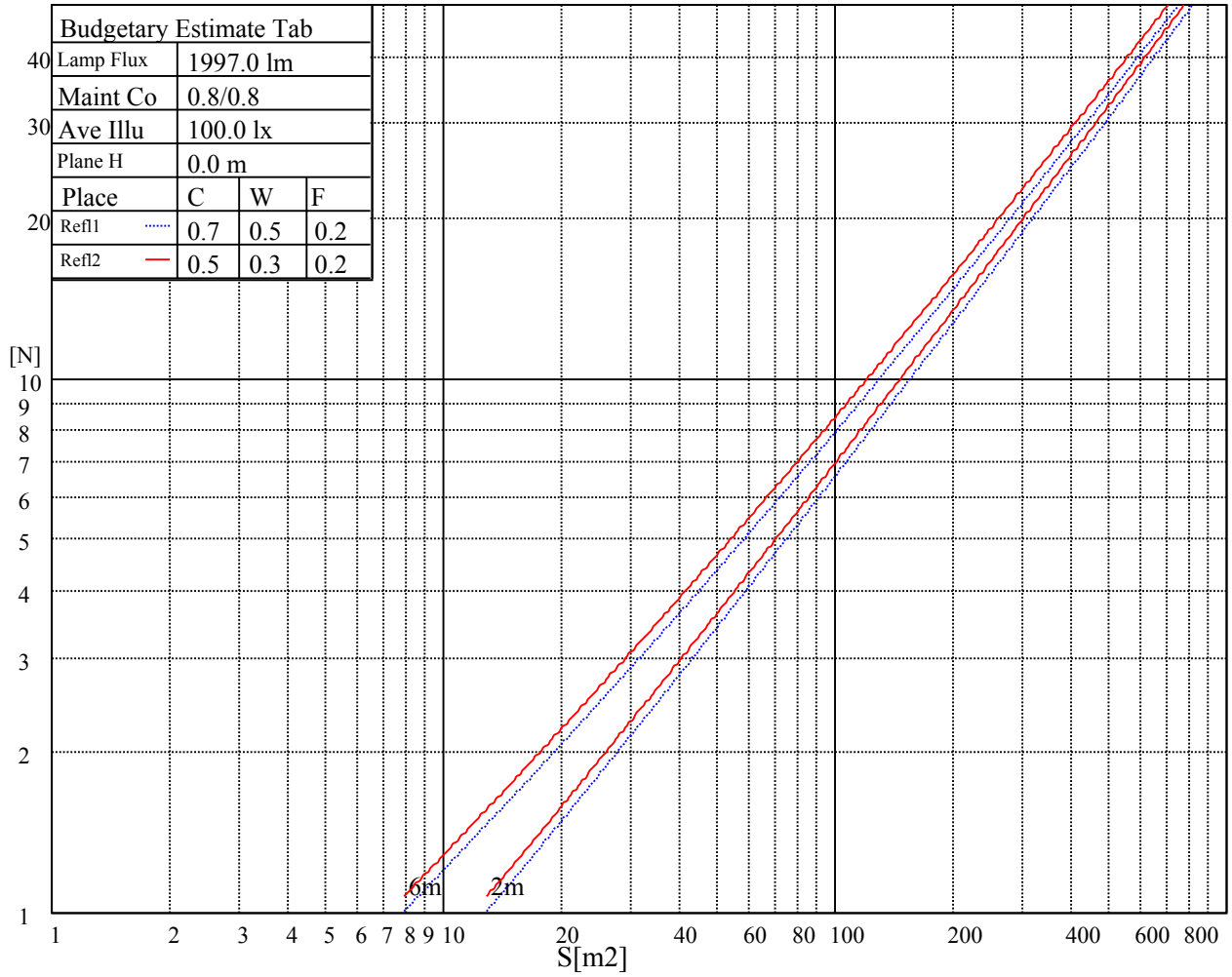


UGR Glare

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

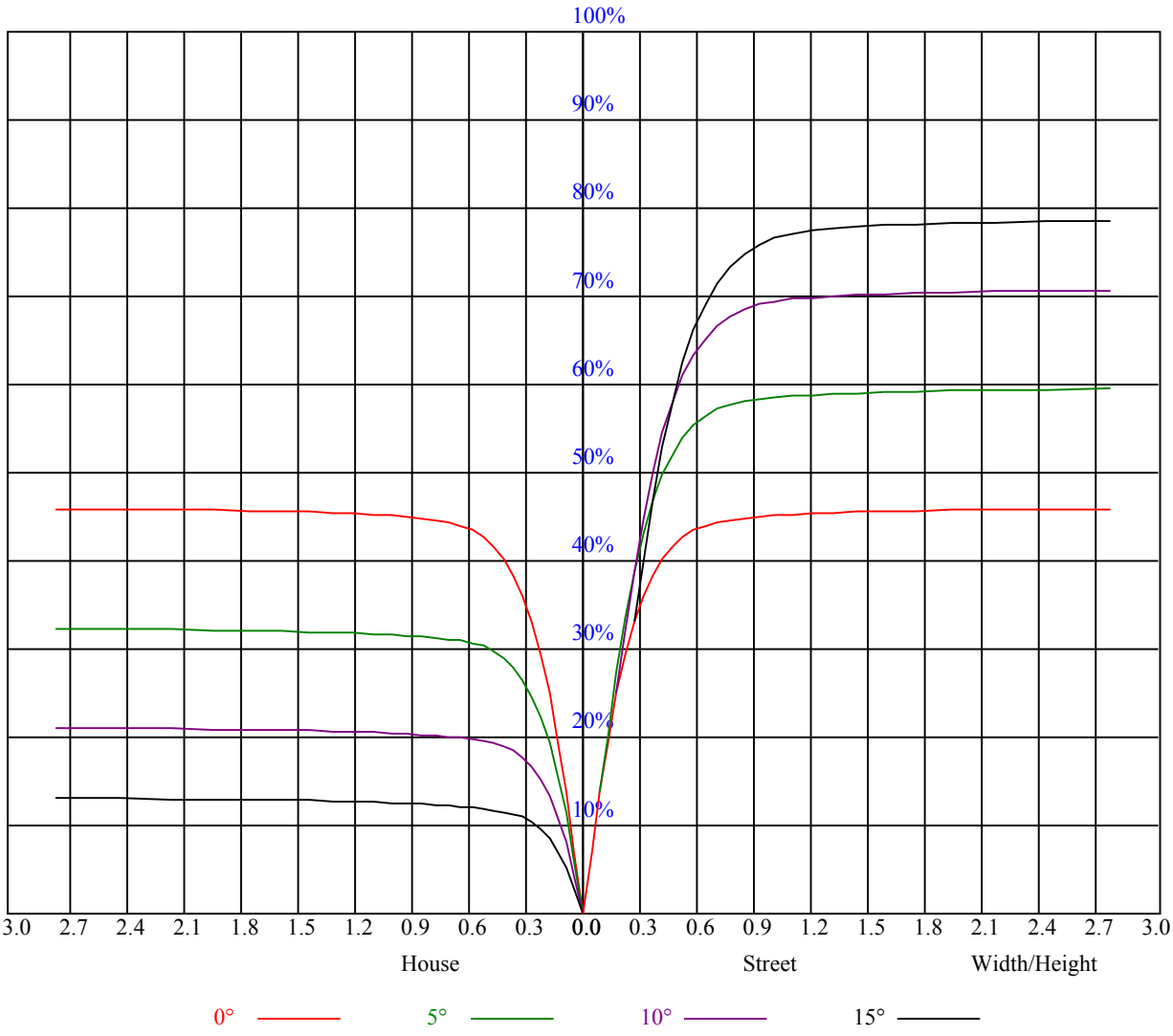


Equipment: GMS1980 Date: 2023/10/10 Operator: NT07
Temperature(°C): 25.0 Humidity(%): 60.0% Distance(m): 7.44

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	1.10	1.10	1.10	1.08	1.08	1.08	1.03	1.03	1.03	0.98	0.98	0.98	0.94	0.94	0.94	0.93
1	1.03	1.01	0.99	1.01	1.00	0.98	0.98	0.96	0.95	0.94	0.93	0.92	0.91	0.90	0.89	0.88
2	0.98	0.94	0.92	0.96	0.93	0.91	0.93	0.91	0.89	0.90	0.88	0.87	0.88	0.86	0.85	0.84
3	0.93	0.89	0.86	0.91	0.88	0.85	0.89	0.86	0.84	0.87	0.84	0.82	0.85	0.83	0.81	0.80
4	0.88	0.84	0.81	0.87	0.83	0.80	0.85	0.82	0.79	0.83	0.81	0.78	0.82	0.79	0.77	0.76
5	0.84	0.80	0.77	0.83	0.79	0.76	0.82	0.78	0.76	0.80	0.77	0.75	0.79	0.76	0.74	0.73
6	0.81	0.76	0.73	0.80	0.76	0.73	0.79	0.75	0.72	0.77	0.74	0.72	0.76	0.74	0.71	0.70
7	0.77	0.73	0.70	0.77	0.73	0.70	0.76	0.72	0.69	0.75	0.71	0.69	0.74	0.71	0.69	0.68
8	0.74	0.70	0.67	0.74	0.70	0.67	0.73	0.69	0.67	0.72	0.69	0.66	0.71	0.68	0.66	0.65
9	0.72	0.67	0.65	0.71	0.67	0.64	0.71	0.67	0.64	0.70	0.66	0.64	0.69	0.66	0.64	0.63
10	0.69	0.65	0.62	0.69	0.65	0.62	0.68	0.65	0.62	0.68	0.64	0.62	0.67	0.64	0.62	0.61

Coefficient Utilization Curve



Equipment: GMS1980	Date: 2023/10/10	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	6517.28	6428.71	6239.40	6051.20	5822.59	5486.04	5183.81	4848.37	4485.80
45.0	6565.44	6530.01	6452.51	6273.17	6093.82	5883.48	5635.49	5279.57	4957.41
90.0	6535.54	6417.09	6278.15	6106.00	5890.12	5583.46	5309.46	4993.95	4645.77
135.0	6565.44	6535.54	6449.19	6291.99	6119.84	5904.51	5666.49	5329.39	5006.12
180.0	6517.28	6573.74	6548.83	6475.76	6360.63	6162.46	5963.74	5727.94	5466.11
225.0	6565.44	6546.61	6441.44	6322.43	6103.79	5887.91	5642.69	5287.32	4969.04
270.0	6535.54	6567.65	6541.63	6458.05	6323.54	6150.84	5887.91	5627.19	5257.98
315.0	6565.44	6537.76	6463.03	6289.22	6114.86	5893.44	5562.43	5251.89	4923.09
360.0	6517.28	6428.71	6239.40	6051.20	5822.59	5486.04	5183.81	4848.37	4485.80

C/γ(°)	9.0	10.0	11.0	12.0	13.0	14.0	15.0	16.0	17.0
0.0	4030.24	3677.64	3342.75	3034.98	2692.34	2444.91	2218.52	1963.34	1788.42
45.0	4611.45	4155.89	3803.29	3458.44	3069.30	2785.89	2527.39	2237.34	2028.10
90.0	4205.71	3840.38	3492.76	3092.00	2804.71	2491.96	2258.37	2046.92	1859.27
135.0	4663.49	4314.76	3878.57	3532.61	3204.92	2907.12	2568.35	2329.22	2059.10
180.0	5083.07	4752.60	4397.23	3944.44	3585.75	3260.27	2893.28	2619.28	2370.74
225.0	4618.65	4164.75	3799.97	3462.31	3141.81	2786.44	2531.82	2302.65	2091.76
270.0	4932.50	4587.65	4210.69	3750.70	3409.73	3095.87	2805.82	2475.36	2242.32
315.0	4552.22	4087.81	3729.12	3385.92	3072.07	2726.11	2471.48	2188.07	1983.26
360.0	4030.24	3677.64	3342.75	3034.98	2692.34	2444.91	2218.52	1963.34	1788.42

C/γ(°)	18.0	19.0	20.0	21.0	22.0	23.0	24.0	25.0	26.0
0.0	1591.36	1446.89	1099.71	1099.71	1051.28	963.37	881.89	802.24	696.79
45.0	1842.67	1677.16	1491.72	1351.68	1226.58	1110.89	995.76	917.15	838.55
90.0	1652.80	1503.35	1366.07	1086.43	1086.43	990.88	910.51	836.89	734.32
135.0	1867.02	1697.64	1508.33	1369.95	1245.40	1125.28	996.31	913.28	839.11
180.0	2114.45	1908.54	1734.17	1546.52	1409.25	1273.08	1146.32	1021.77	935.42
225.0	1849.86	1680.48	1523.83	1352.23	1081.22	1081.22	991.11	911.67	833.46
270.0	2044.71	1839.34	1630.11	1484.53	1317.36	1185.07	1075.47	971.40	897.78
315.0	1801.70	1593.02	1450.76	1227.13	1083.38	1059.25	973.73	895.84	815.58
360.0	1591.36	1446.89	1099.71	1099.71	1051.28	963.37	881.89	802.24	696.79

C/γ(°)	27.0	28.0	29.0	30.0	31.0	32.0	33.0	34.0	35.0
0.0	610.55	530.01	451.80	358.47	288.28	226.51	168.11	139.49	123.11
45.0	731.17	645.37	544.07	466.02	390.19	317.12	283.36	283.36	142.15
90.0	649.80	548.28	469.84	393.67	303.50	239.13	183.66	142.09	113.09
135.0	758.29	650.35	570.64	492.59	397.94	327.08	292.77	292.77	139.44
180.0	860.69	785.97	683.01	598.32	498.13	416.76	341.48	287.23	287.23
225.0	731.39	647.30	567.43	488.16	392.62	318.78	252.14	195.23	143.20
270.0	816.41	709.58	629.32	547.39	466.02	387.42	296.09	296.09	216.38
315.0	712.57	630.37	548.06	469.95	373.58	302.12	238.35	174.03	139.38
360.0	610.55	530.01	451.80	358.47	288.28	226.51	168.11	139.49	123.11

C/γ(°)	36.0	37.0	38.0	39.0	40.0	41.0	42.0	43.0	44.0
0.0	108.99	99.30	87.79	79.76	72.51	66.04	58.90	54.03	49.54
45.0	121.67	106.94	96.92	87.74	79.71	70.80	64.49	58.79	52.70
90.0	101.96	92.50	83.64	74.01	67.25	61.33	54.80	50.10	45.89
135.0	114.31	98.64	89.40	80.65	73.07	64.99	59.34	54.19	49.60
180.0	146.13	119.62	103.23	93.60	85.13	77.22	68.53	62.22	56.85
225.0	119.29	106.33	93.77	84.86	74.67	67.64	61.44	55.96	50.10
270.0	135.01	110.26	99.53	88.07	79.76	72.24	64.15	58.40	53.47
315.0	117.35	106.00	96.15	87.07	76.72	69.52	63.21	57.68	51.70
360.0	108.99	99.30	87.79	79.76	72.51	66.04	58.90	54.03	49.54

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	45.61	41.29	38.30	35.76	33.49	31.05	29.45	27.57	26.46
45.0	48.38	44.67	40.57	37.64	34.43	32.27	30.50	28.95	27.12
90.0	41.46	38.42	34.93	32.66	30.67	28.89	27.40	25.85	24.74
135.0	44.67	41.13	38.08	34.65	32.27	30.28	28.06	26.63	25.41
180.0	52.25	46.94	43.29	40.19	36.59	34.10	31.50	29.56	28.06
225.0	46.05	42.46	39.30	35.81	33.38	31.27	29.01	27.57	26.24
270.0	49.04	44.23	40.85	37.97	35.32	32.55	30.61	28.84	27.12
315.0	47.49	43.73	39.63	36.81	34.49	31.77	29.89	28.12	26.68
360.0	45.61	41.29	38.30	35.76	33.49	31.05	29.45	27.57	26.46

C/γ(°)	54.0	55.0	56.0	57.0	58.0	59.0	60.0	61.0	62.0
0.0	25.35	24.19	23.36	22.47	21.42	20.31	19.43	18.54	17.77
45.0	25.96	25.13	24.08	23.08	22.20	21.31	20.43	19.32	18.49
90.0	23.86	23.03	21.98	21.37	20.54	19.48	18.76	17.82	17.05
135.0	24.02	23.25	22.36	21.37	20.65	20.04	19.21	18.16	17.55
180.0	26.35	25.19	24.30	23.36	22.31	21.64	20.81	19.93	18.99
225.0	24.80	23.91	23.08	22.09	21.37	20.54	19.48	18.76	17.99
270.0	25.85	24.85	23.80	23.03	22.09	21.48	20.59	19.76	18.76
315.0	25.57	24.69	23.53	22.75	22.03	21.20	20.04	19.26	18.43
360.0	25.35	24.19	23.36	22.47	21.42	20.31	19.43	18.54	17.77

C/γ(°)	63.0	64.0	65.0	66.0	67.0	68.0	69.0	70.0	71.0
0.0	16.94	16.27	15.67	14.95	14.45	13.89	13.28	12.84	12.45
45.0	17.55	16.88	16.27	15.44	15.00	14.50	13.95	13.34	12.90
90.0	16.44	15.72	15.11	14.61	14.17	13.62	13.17	12.79	12.34
135.0	16.83	16.16	15.50	15.00	14.39	13.95	13.51	12.95	12.57
180.0	18.16	17.33	16.44	15.89	15.28	14.56	14.17	13.73	13.17
225.0	17.21	16.44	15.83	15.28	14.72	14.17	13.73	13.28	12.73
270.0	17.99	17.21	16.61	15.83	15.28	14.78	14.17	13.73	13.28
315.0	17.60	16.77	16.16	15.39	14.83	14.39	13.73	13.28	12.84
360.0	16.94	16.27	15.67	14.95	14.45	13.89	13.28	12.84	12.45

C/γ(°)	72.0	73.0	74.0	75.0	76.0	77.0	78.0	79.0	80.0
0.0	11.90	11.57	11.24	10.85	10.46	10.19	9.91	9.69	9.35
45.0	12.51	12.07	11.62	11.29	10.96	10.57	10.30	9.91	9.69
90.0	11.96	11.51	11.18	10.85	10.52	10.24	9.91	9.69	9.41
135.0	12.23	11.85	11.46	11.13	10.85	10.46	10.19	9.91	9.69
180.0	12.73	12.40	11.96	11.57	11.24	10.85	10.63	10.19	9.96
225.0	12.34	11.90	11.51	11.18	10.85	10.46	10.19	9.91	9.63
270.0	12.73	12.29	11.90	11.46	11.13	10.79	10.52	10.13	9.85
315.0	12.45	11.90	11.57	11.18	10.85	10.46	10.19	9.91	9.58
360.0	11.90	11.57	11.24	10.85	10.46	10.19	9.91	9.69	9.35

C/γ(°)	81.0	82.0	83.0	84.0	85.0	86.0	87.0	88.0	89.0
0.0	9.13	8.86	8.58	8.41	8.25	8.03	7.86	7.64	7.75
45.0	9.47	9.13	8.86	8.64	8.41	8.19	7.97	7.86	7.64
90.0	9.19	8.97	8.75	8.47	8.25	8.03	7.86	7.75	7.69
135.0	9.41	9.19	8.86	8.69	8.47	8.19	8.03	7.86	7.64
180.0	9.63	9.41	9.08	8.86	8.58	8.36	8.19	7.97	7.86
225.0	9.35	9.08	8.86	8.64	8.41	8.19	8.03	7.86	7.69
270.0	9.63	9.35	9.08	8.80	8.58	8.41	8.14	7.97	7.86
315.0	9.35	9.08	8.86	8.64	8.41	8.19	8.03	7.86	7.69
360.0	9.13	8.86	8.58	8.41	8.25	8.03	7.86	7.64	7.75

Intensity data(cd)

C/γ(°)	90.0
0.0	7.75
45.0	7.80
90.0	7.69
135.0	7.69
180.0	7.64
225.0	7.64
270.0	7.64
315.0	7.64
360.0	7.75