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Address:380JinOu Road,GaoXin Zone,Jiang Men City,Guangdong,China

NATA

Client:
LumCAT: 1-1380-L Luminaire:
92.70.410.00 Report No: 2023829-B014
Ballast type: AC
Test No: 2023829-C014
LampCAT: LUXEON CoB 1203 LES9
Lamp flux(lm): 1615.6 Number of
Lamps: 1 Length(mm): 0
Phm Type: C

Voltage(V): 35.800
Current(A): 0.378
Power (W): 13.532
PF: 0.000
Width(mm): 0
Height(mm): 0

Photometric Results

Lumens(lm): 1504.29, Efficiency(%): 93.11% , Luminous Efficacy(lm/W): 111.17
Central intensity(cd): 2259.755, Maximum intensity(cd): 2259.755
Angle of maximum intensity: C=0.0 γ=0.0
Beam Angle(50%Imax): [C0/180]Total=51.4
[C90/270]Total=51.4
Field angle(10%Imax): [C0/180]Total=69.6
[C90/270]Total=69.6
Maximum s/h(1/2): C0_180=0.84 C90_270=0.84
Maximum s/h(1/4): C0_180=0.76 C90_270=0.76
Up flux rate of lamp(%): 0.00%
Down flux rate of lamp(%): 93.11%
Up flux rate of LUM(%): - -
Down flux rate of LUM(%): 100.00%
CIE Type : Direct lighting
Output flux ratio in π solid angle : 97.978%

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	2259.755	0.000	0	0.00%	0.00%
1.0	2258.233	2.162	2.162	0.13%	0.14%
2.0	2252.144	6.474	8.635	0.40%	0.57%
3.0	2240.243	10.744	19.38	0.67%	1.29%
4.0	2223.222	14.941	34.32	0.92%	2.28%
5.0	2203.433	19.043	53.364	1.18%	3.55%
6.0	2182.122	23.047	76.411	1.43%	5.08%
7.0	2158.943	26.945	103.356	1.67%	6.87%
8.0	2132.373	30.712	134.068	1.90%	8.91%
9.0	2108.156	34.367	168.435	2.13%	11.20%
10.0	2075.635	37.862	206.297	2.34%	13.71%
11.0	2041.593	41.140	247.437	2.55%	16.45%
12.0	2003.814	44.222	291.659	2.74%	19.39%
13.0	1974.062	47.207	338.866	2.92%	22.53%
14.0	1942.579	50.133	388.999	3.10%	25.86%
15.0	1911.374	52.909	441.907	3.27%	29.38%
16.0	1878.231	55.528	497.436	3.44%	33.07%
17.0	1838.445	57.879	555.314	3.58%	36.92%
18.0	1790.841	59.839	615.153	3.70%	40.89%
19.0	1734.104	61.327	676.48	3.80%	44.97%
20.0	1671.347	62.329	738.809	3.86%	49.11%
21.0	1598.349	62.785	801.594	3.89%	53.29%
22.0	1522.722	62.719	864.313	3.88%	57.46%
23.0	1399.104	61.308	925.621	3.79%	61.53%
24.0	1287.456	58.738	984.359	3.64%	65.44%
25.0	1208.528	56.753	1041.112	3.51%	69.21%
26.0	1097.074	54.424	1095.536	3.37%	72.83%
27.0	986.872	50.984	1146.52	3.16%	76.22%
28.0	865.177	46.890	1193.41	2.90%	79.33%
29.0	740.036	41.997	1235.407	2.60%	82.13%
30.0	622.244	36.781	1272.189	2.28%	84.57%
31.0	510.789	31.531	1303.719	1.95%	86.67%
32.0	405.036	26.237	1329.957	1.62%	88.41%
33.0	319.626	21.349	1351.305	1.32%	89.83%
34.0	258.737	17.503	1368.808	1.08%	90.99%
35.0	217.062	14.777	1383.585	0.91%	91.98%
36.0	171.977	12.387	1395.972	0.77%	92.80%
37.0	121.633	9.576	1405.548	0.59%	93.44%

Zonal flux distribution table

γ(°)	Average I(cd)	Zonal F(lm)	Sum F(lm)	Eff Flux(%)	Eff Sum(%)
38.0	100.065	7.400	1412.948	0.46%	93.93%
39.0	84.380	6.296	1419.243	0.39%	94.35%
40.0	73.101	5.492	1424.736	0.34%	94.71%
41.0	63.027	4.847	1429.583	0.30%	95.03%
42.0	56.025	4.325	1433.909	0.27%	95.32%
43.0	49.182	3.897	1437.806	0.24%	95.58%
44.0	43.972	3.516	1441.322	0.22%	95.81%
45.0	39.363	3.203	1444.524	0.20%	96.03%
46.0	35.350	2.922	1447.446	0.18%	96.22%
47.0	32.057	2.681	1450.127	0.17%	96.40%
48.0	29.234	2.478	1452.605	0.15%	96.56%
49.0	26.895	2.305	1454.91	0.14%	96.72%
50.0	24.861	2.158	1457.068	0.13%	96.86%
51.0	23.159	2.032	1459.099	0.13%	97.00%
52.0	21.685	1.924	1461.024	0.12%	97.12%
53.0	20.425	1.832	1462.855	0.11%	97.25%
54.0	19.311	1.751	1464.607	0.11%	97.36%
55.0	18.308	1.679	1466.286	0.10%	97.47%
56.0	17.492	1.618	1467.904	0.10%	97.58%
57.0	16.682	1.563	1469.466	0.10%	97.68%
58.0	16.011	1.512	1470.978	0.09%	97.79%
59.0	15.402	1.469	1472.447	0.09%	97.88%
60.0	14.814	1.428	1473.874	0.09%	97.98%
61.0	14.288	1.389	1475.263	0.09%	98.07%
62.0	13.811	1.354	1476.617	0.08%	98.16%
63.0	13.375	1.322	1477.939	0.08%	98.25%
64.0	12.953	1.292	1479.231	0.08%	98.33%
65.0	12.572	1.263	1480.494	0.08%	98.42%
66.0	12.212	1.237	1481.731	0.08%	98.50%
67.0	11.853	1.210	1482.941	0.07%	98.58%
68.0	11.527	1.184	1484.125	0.07%	98.66%
69.0	11.216	1.160	1485.285	0.07%	98.74%
70.0	10.905	1.136	1486.422	0.07%	98.81%
71.0	10.614	1.112	1487.534	0.07%	98.89%
72.0	10.310	1.088	1488.622	0.07%	98.96%
73.0	10.026	1.063	1489.685	0.07%	99.03%
74.0	9.721	1.038	1490.723	0.06%	99.10%
75.0	9.465	1.014	1491.737	0.06%	99.17%

Zonal flux distribution table

γ(°)	Average I(cd)	Zonal F(lm)	Sum F(lm)	Eff Flux(%)	Eff Sum(%)
76.0	9.182	0.990	1492.727	0.06%	99.23%
77.0	8.926	0.965	1493.692	0.06%	99.30%
78.0	8.656	0.941	1494.634	0.06%	99.36%
79.0	8.400	0.916	1495.55	0.06%	99.42%
80.0	8.165	0.893	1496.443	0.06%	99.48%
81.0	7.929	0.870	1497.313	0.05%	99.54%
82.0	7.729	0.849	1498.162	0.05%	99.59%
83.0	7.542	0.830	1498.993	0.05%	99.65%
84.0	7.341	0.811	1499.803	0.05%	99.70%
85.0	7.141	0.790	1500.594	0.05%	99.75%
86.0	6.975	0.772	1501.365	0.05%	99.81%
87.0	6.808	0.754	1502.12	0.05%	99.86%
88.0	6.656	0.738	1502.857	0.05%	99.90%
89.0	6.525	0.722	1503.58	0.04%	99.95%
90.0	6.449	0.711	1504.291	0.04%	100.00%

Zonal flux distribution table

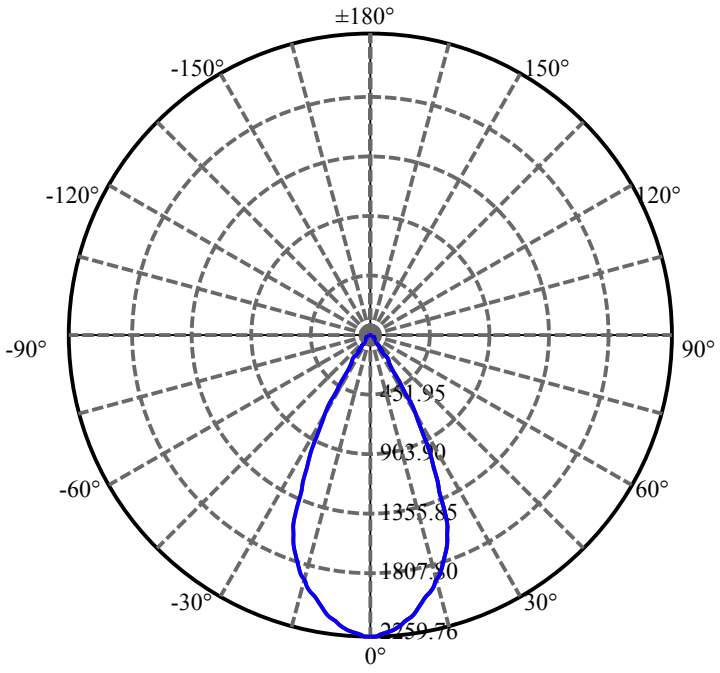
ZONAL LUMEN SUMMARY

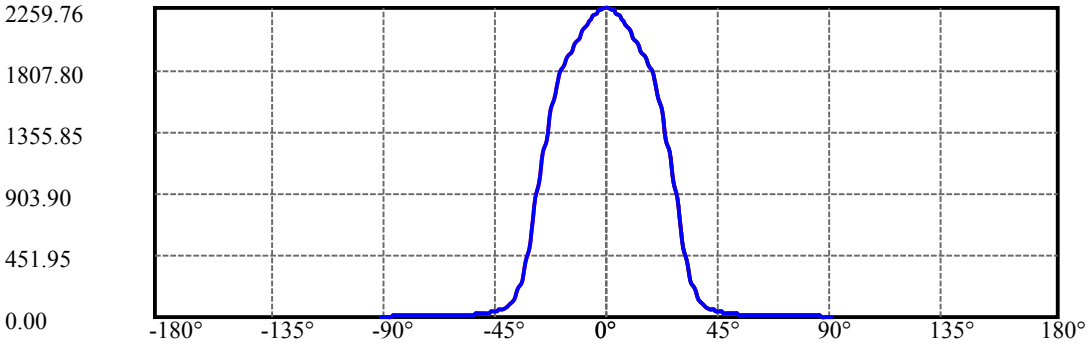
Zone	Lumens	%Lamp	%Fixt
0-30	1272.19	78.74%	84.57%
0-40	1424.74	88.19%	94.71%
0-60	1473.87	91.23%	97.98%
0-90	1503.58	93.07%	99.95%
0-120	1503.58	93.07%	99.95%
0-180	1504.29	93.11%	100.00%
60-90	29.71	1.84%	1.97%
90-120	0.00	0.00%	0.00%
90-130	0.00	0.00%	0.00%
90-150	0.00	0.00%	0.00%
90-180	0.00	0.00%	0.00%
0-28.24	1203.43	74.49%	80.00%

ZONAL LUMEN SUMMARY

0-10	206.30
10-20	532.51
20-30	533.38
30-40	152.55
40-50	32.33
50-60	16.81
60-70	12.55
70-80	10.02
80-90	7.14
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):

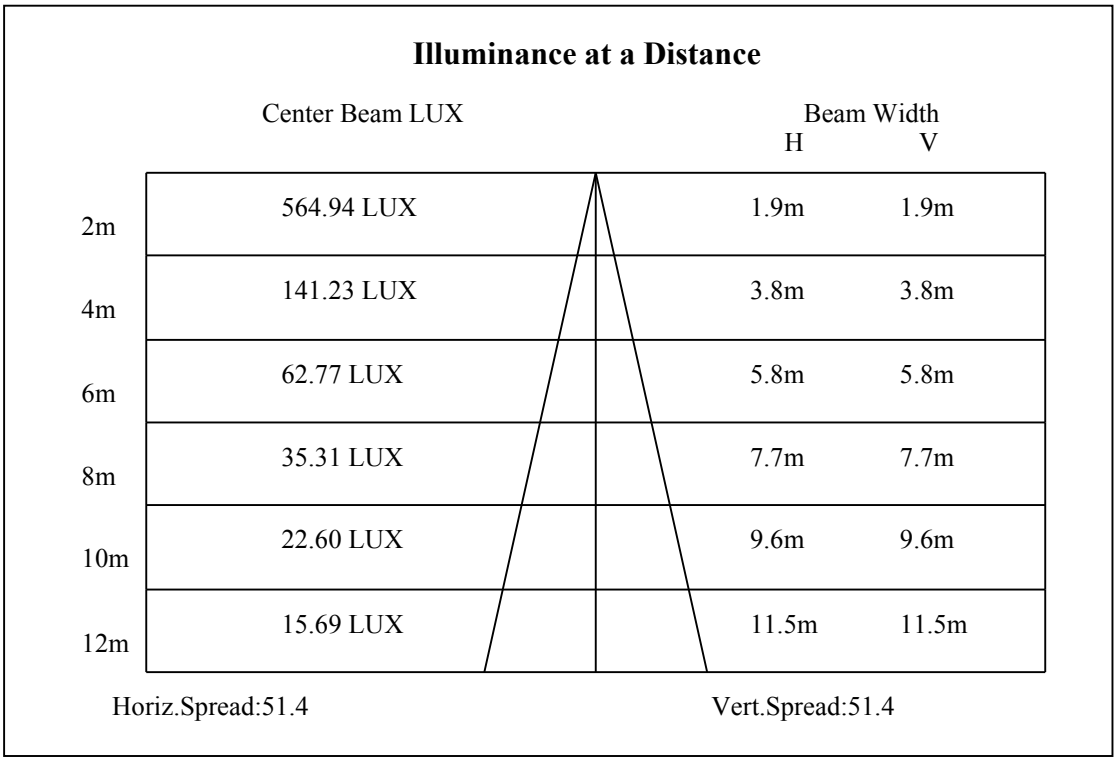
C0/C180:

C90/C270:

Field angle(10%Imax):C0/180Left:34.8 Right:34.8
:C90/270Left:34.8 Right:34.8

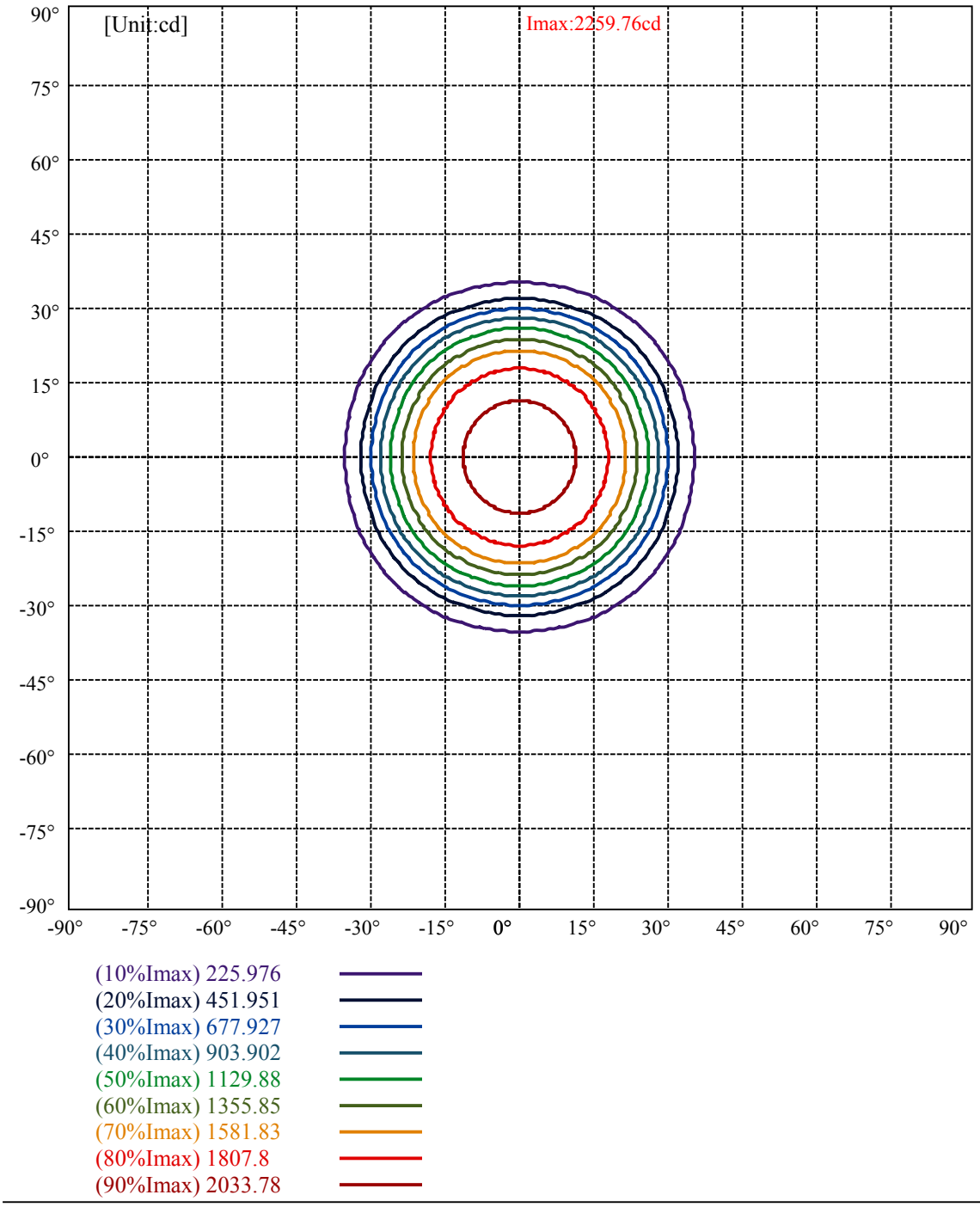
Beam Angle(50%Imax):C0/180Left:25.7 Right:25.7
:C90/270Left:25.7 Right:25.7

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)

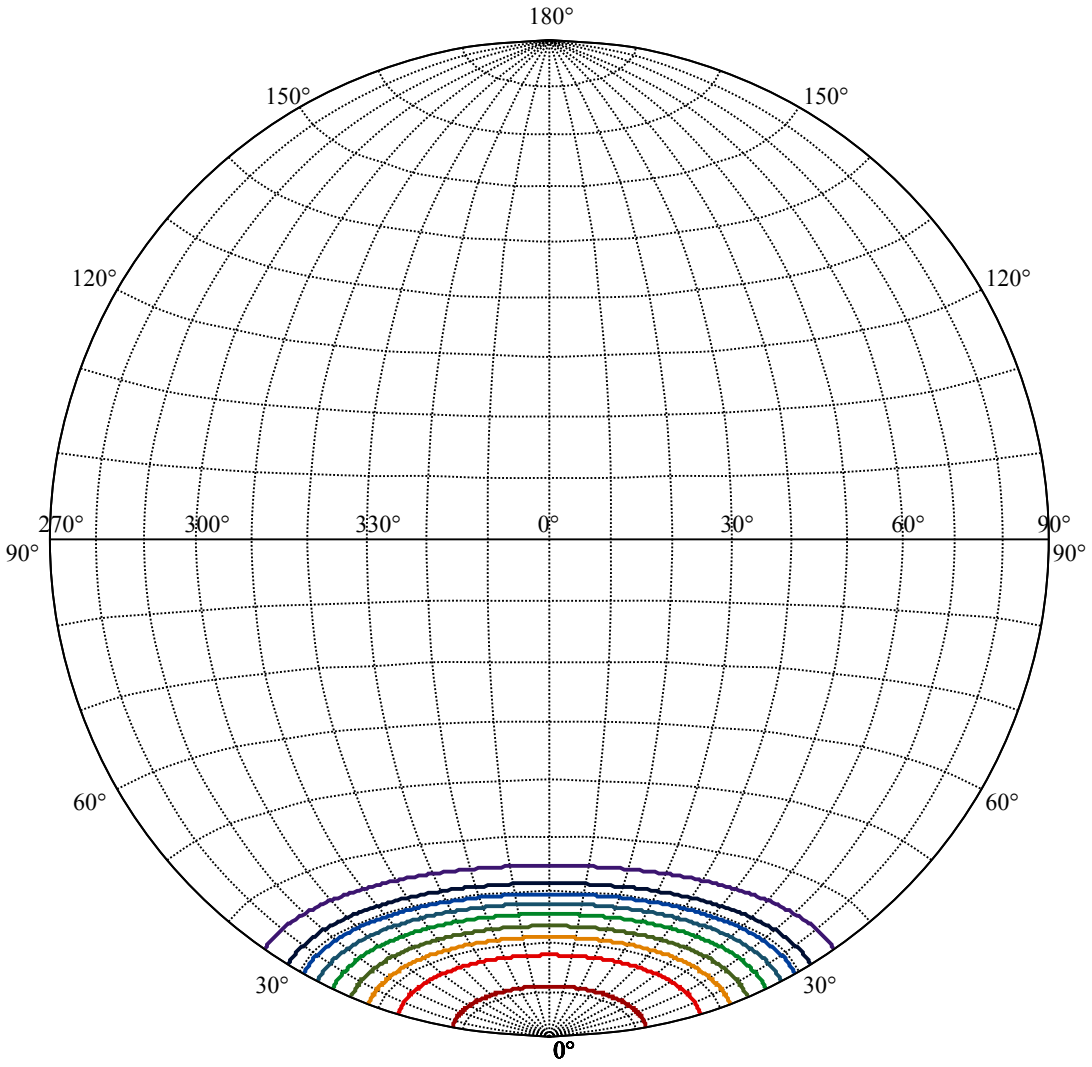


Equipment: GMS1980
Temperature(°C): 25.0

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

Operator: NT07
Distance(m): 7.44

ISO candela diagram on circular web



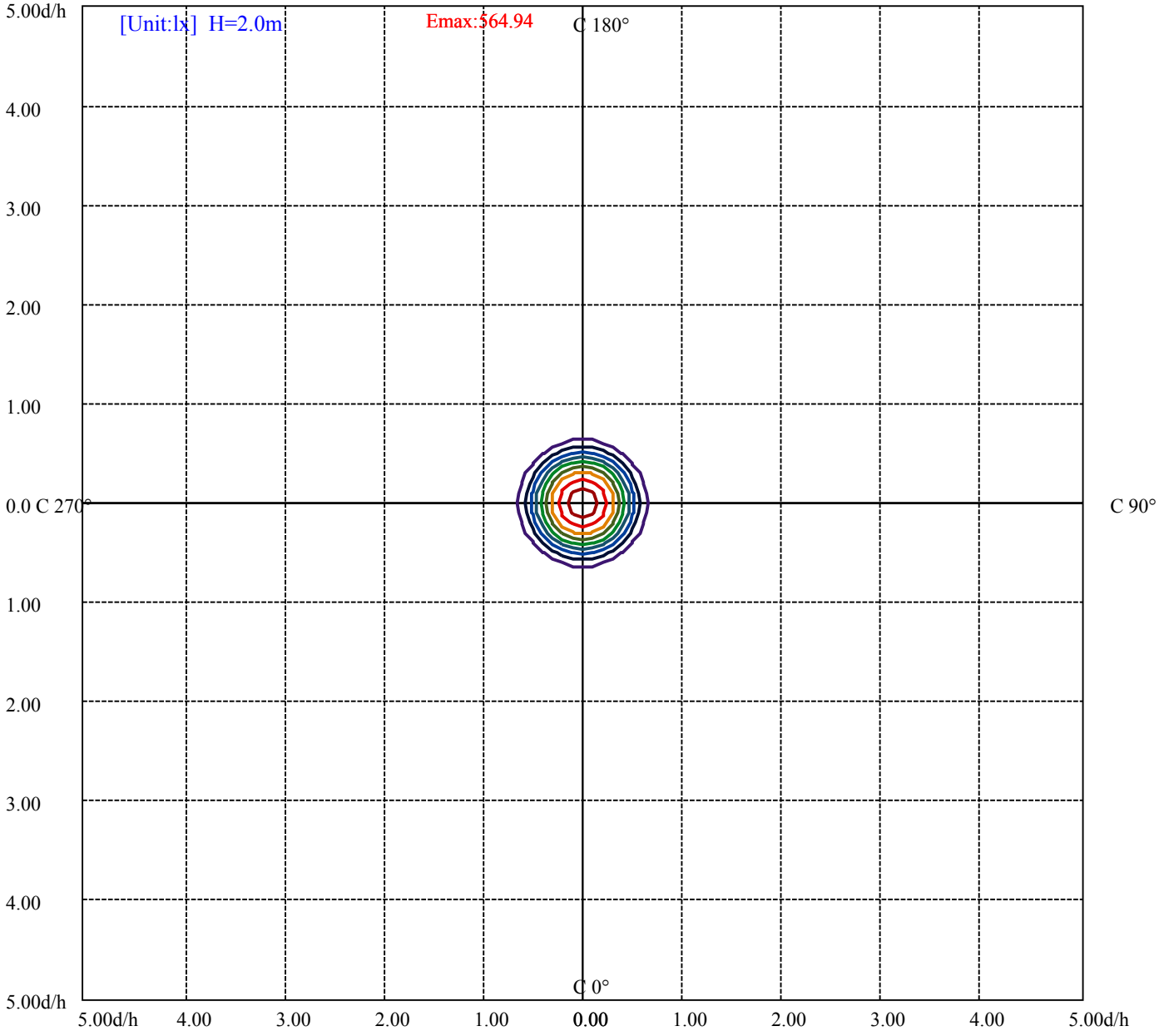
House [Unit:cd] Road

Imax:2259.76

(10%Imax) 225.976
(20%Imax) 451.951
(30%Imax) 677.927
(40%Imax) 903.902
(50%Imax) 1129.88
(60%Imax) 1355.85
(70%Imax) 1581.83
(80%Imax) 1807.8
(90%Imax) 2033.78

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

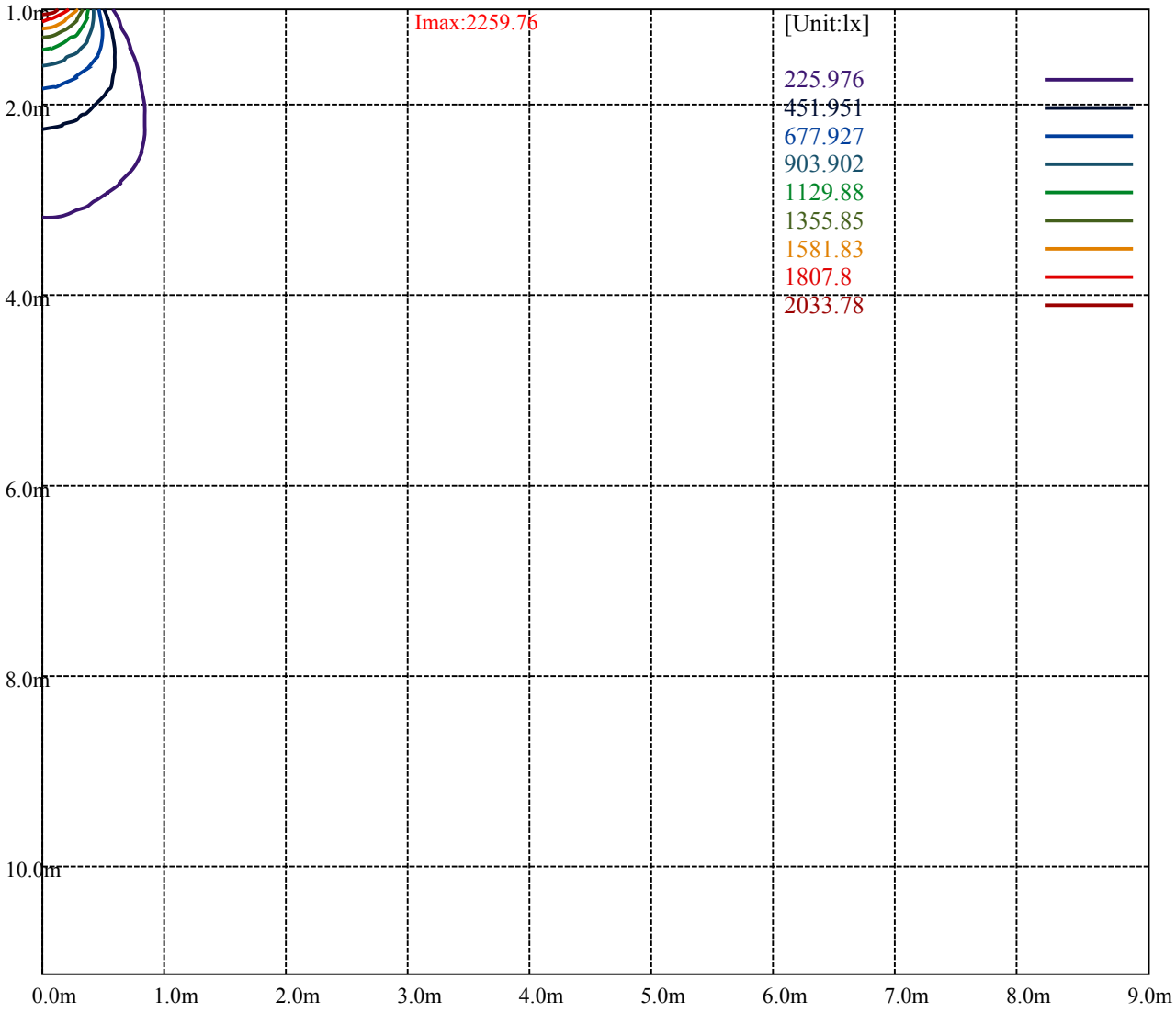
ISO illuminance diagram



(10%Emax) 56.49375
(20%Emax) 112.9877
(30%Emax) 169.4815
(40%Emax) 225.9755
(50%Emax) 282.47
(60%Emax) 338.9625
(70%Emax) 395.4575
(80%Emax) 451.95
(90%Emax) 508.445

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

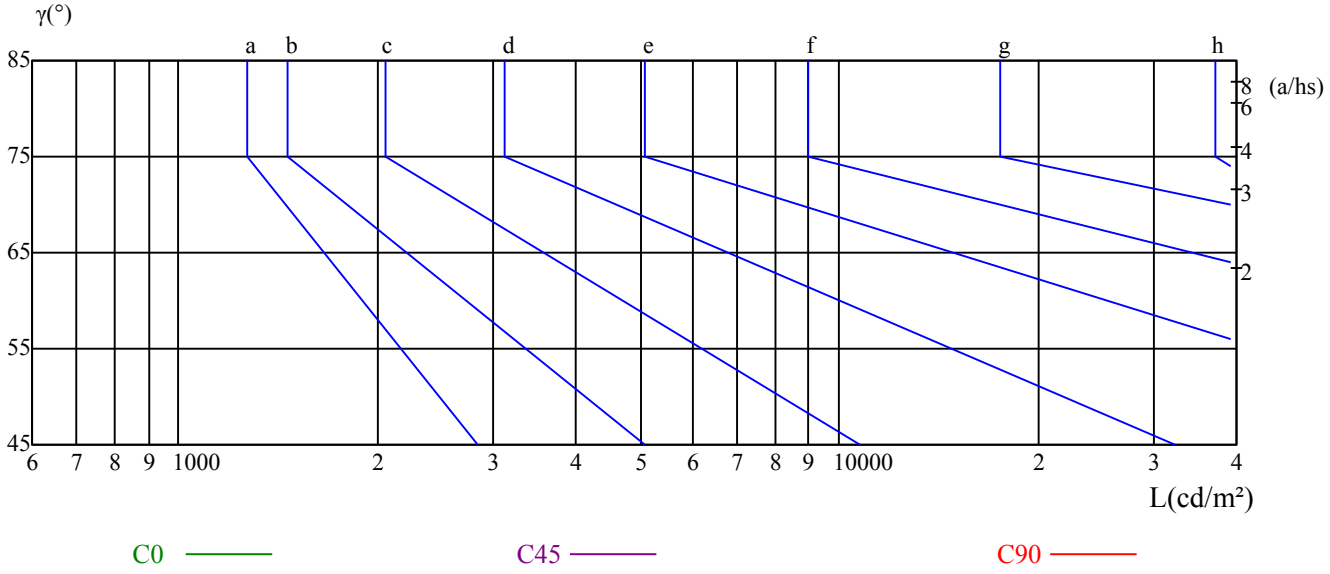
γ	45	50	55	60	65	70	75	80	85
C0	0	0	0	0	0	0	0	0	0
C45	0	0	0	0	0	0	0	0	0
C90	0	0	0	0	0	0	0	0	0

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

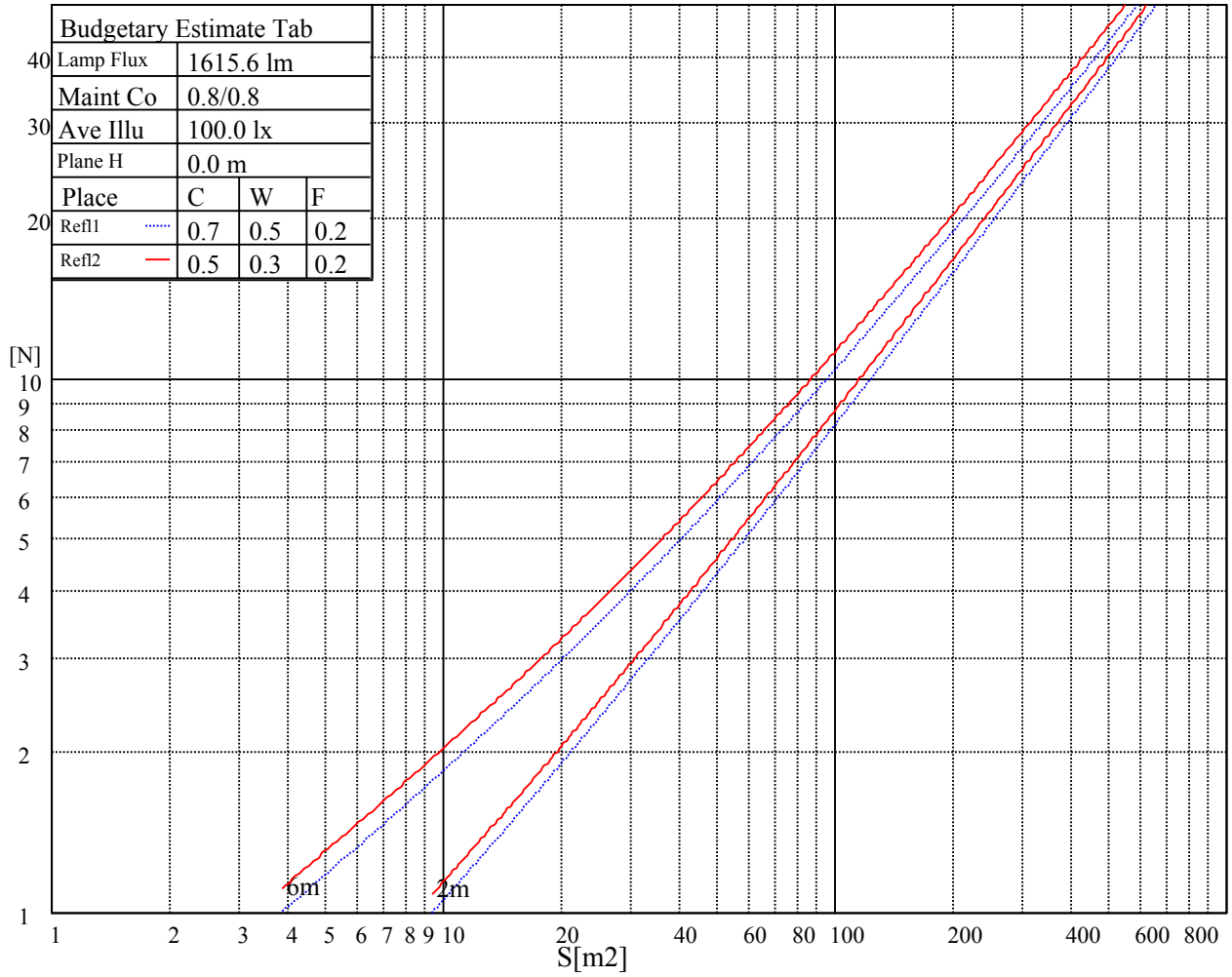
Luminance Limitting Curve



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

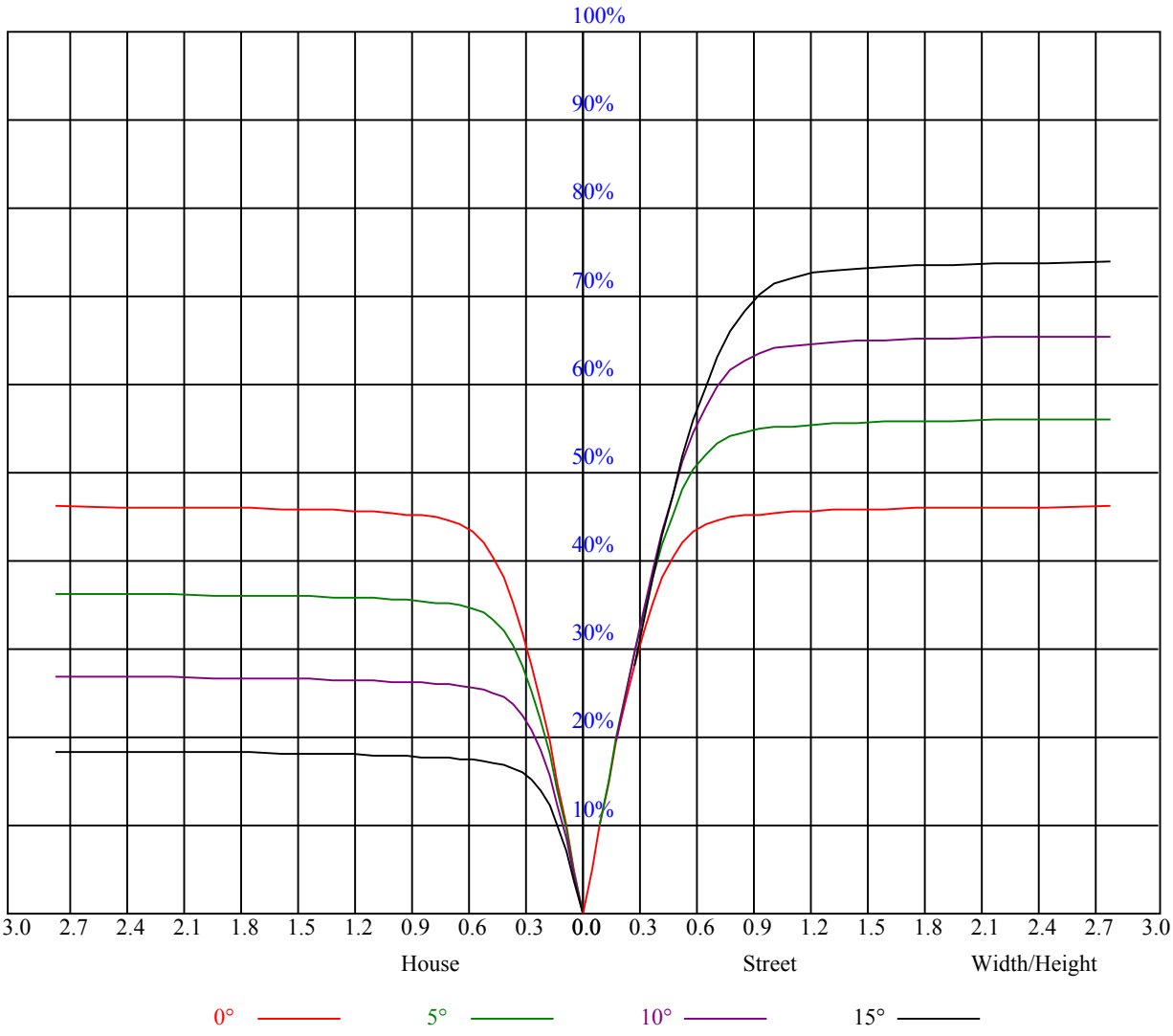


Equipment: GMS1980 Date: 2023/8/29 Operator: NT07
Temperature(°C): 25.0 Humidity(%): 60.0% Distance(m): 7.44

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	1.11	1.11	1.11	1.08	1.08	1.08	1.03	1.03	1.03	0.99	0.99	0.99	0.95	0.95	0.95	0.93
1	1.03	1.01	0.99	1.01	0.99	0.97	0.98	0.96	0.94	0.94	0.93	0.92	0.91	0.90	0.89	0.87
2	0.97	0.93	0.90	0.95	0.92	0.89	0.92	0.89	0.87	0.89	0.87	0.85	0.87	0.85	0.83	0.82
3	0.91	0.86	0.83	0.90	0.86	0.82	0.87	0.84	0.81	0.85	0.82	0.80	0.83	0.81	0.79	0.77
4	0.86	0.81	0.77	0.85	0.80	0.77	0.83	0.79	0.76	0.81	0.78	0.75	0.79	0.76	0.74	0.73
5	0.81	0.76	0.72	0.80	0.75	0.72	0.78	0.74	0.71	0.77	0.73	0.71	0.75	0.72	0.70	0.69
6	0.77	0.71	0.68	0.76	0.71	0.68	0.75	0.70	0.67	0.73	0.70	0.67	0.72	0.69	0.66	0.65
7	0.73	0.68	0.64	0.72	0.67	0.64	0.71	0.67	0.63	0.70	0.66	0.63	0.69	0.65	0.63	0.62
8	0.69	0.64	0.61	0.69	0.64	0.60	0.68	0.63	0.60	0.67	0.63	0.60	0.66	0.62	0.60	0.58
9	0.66	0.61	0.57	0.65	0.61	0.57	0.65	0.60	0.57	0.64	0.60	0.57	0.63	0.59	0.57	0.56
10	0.63	0.58	0.55	0.62	0.58	0.54	0.62	0.57	0.54	0.61	0.57	0.54	0.60	0.57	0.54	0.53

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	2251.73	2241.21	2222.95	2204.12	2178.11	2160.40	2131.06	2096.74	2066.29
45.0	2255.05	2256.71	2253.94	2236.78	2221.28	2194.71	2179.22	2150.43	2116.11
90.0	2268.34	2263.35	2247.85	2229.59	2215.20	2200.80	2175.34	2151.54	2129.40
135.0	2263.91	2270.00	2277.19	2263.91	2248.96	2235.68	2220.73	2200.25	2177.56
180.0	2251.73	2255.60	2257.82	2263.35	2255.60	2238.44	2225.71	2206.89	2191.95
225.0	2255.05	2256.71	2253.39	2240.66	2227.93	2201.91	2176.45	2162.06	2140.47
270.0	2268.34	2263.91	2259.48	2257.26	2232.91	2218.52	2196.93	2174.23	2149.88
315.0	2263.91	2258.37	2244.53	2226.27	2205.79	2177.00	2151.54	2129.40	2087.33
360.0	2251.73	2241.21	2222.95	2204.12	2178.11	2160.40	2131.06	2096.74	2066.29

C/γ(°)	9.0	10.0	11.0	12.0	13.0	14.0	15.0	16.0	17.0
0.0	2025.33	1987.69	1946.18	1911.86	1885.29	1855.95	1824.40	1786.21	1727.53
45.0	2086.22	2041.94	2007.07	1973.85	1934.55	1910.75	1888.61	1854.84	1820.52
90.0	2106.15	2067.96	2036.40	1997.10	1971.64	1930.12	1891.93	1848.20	1788.97
135.0	2159.29	2133.83	2100.06	2066.29	2038.06	2013.16	1981.05	1940.09	1898.57
180.0	2169.81	2149.88	2132.17	2099.51	2069.06	2027.55	1999.32	1974.41	1946.18
225.0	2124.42	2086.78	2051.35	2012.05	1988.80	1962.23	1937.32	1916.84	1884.18
270.0	2125.52	2108.36	2083.45	2031.98	1996.55	1955.03	1921.27	1891.93	1864.81
315.0	2068.51	2028.65	1976.07	1937.87	1908.54	1885.84	1847.09	1813.33	1776.80
360.0	2025.33	1987.69	1946.18	1911.86	1885.29	1855.95	1824.40	1786.21	1727.53

C/γ(°)	18.0	19.0	20.0	21.0	22.0	23.0	24.0	25.0	26.0
0.0	1676.61	1621.25	1553.17	1461.83	1377.14	1080.11	1080.11	1022.16	911.90
45.0	1780.12	1712.03	1647.82	1575.86	1488.40	1407.59	1314.59	1182.85	1069.93
90.0	1728.64	1652.80	1585.27	1509.44	1430.28	1239.87	1098.77	1098.77	982.25
135.0	1853.18	1792.29	1704.28	1630.66	1551.51	1449.10	1353.89	1252.04	1109.78
180.0	1903.55	1867.02	1818.31	1750.23	1691.00	1593.57	1500.03	1419.76	1290.79
225.0	1830.49	1775.13	1720.33	1662.21	1575.86	1501.13	1419.76	1243.74	1098.88
270.0	1821.63	1781.78	1730.30	1661.66	1594.68	1521.06	1429.73	1346.14	1237.10
315.0	1732.51	1670.52	1611.29	1534.90	1472.90	1400.39	1102.75	1102.75	1075.96
360.0	1676.61	1621.25	1553.17	1461.83	1377.14	1080.11	1080.11	1022.16	911.90

C/γ(°)	27.0	28.0	29.0	30.0	31.0	32.0	33.0	34.0	35.0
0.0	764.38	650.90	543.74	418.81	334.83	262.60	207.24	156.93	126.93
45.0	950.37	833.02	687.44	580.05	478.75	385.21	283.36	283.36	207.47
90.0	836.39	723.31	613.37	506.93	383.38	297.97	229.88	169.71	138.22
135.0	991.33	871.76	725.63	615.48	510.86	385.76	303.28	284.46	284.46
180.0	1186.73	1069.38	927.12	806.45	685.22	568.43	462.15	348.67	292.77
225.0	1069.54	950.97	830.08	679.41	566.99	439.78	348.17	273.34	202.59
270.0	1126.94	987.45	870.10	754.97	616.03	509.20	412.88	309.92	290.55
315.0	969.30	834.62	722.81	615.86	510.25	391.35	310.04	243.50	193.52
360.0	764.38	650.90	543.74	418.81	334.83	262.60	207.24	156.93	126.93

C/γ(°)	36.0	37.0	38.0	39.0	40.0	41.0	42.0	43.0	44.0
0.0	105.17	88.62	73.40	64.60	57.35	49.98	44.95	39.25	35.48
45.0	131.91	108.66	92.11	76.83	67.53	58.45	52.59	47.33	42.51
90.0	109.16	92.72	80.26	68.20	60.34	53.91	48.27	42.07	37.86
135.0	133.57	111.54	93.94	81.04	68.86	61.17	54.58	47.38	42.40
180.0	292.77	169.27	132.46	110.38	93.94	78.21	68.75	59.17	52.81
225.0	163.18	133.96	110.71	89.78	77.38	67.53	59.56	51.59	46.22
270.0	290.55	145.41	120.45	101.35	87.40	73.62	64.99	57.79	51.70
315.0	149.51	122.88	97.20	82.86	72.02	61.33	54.52	48.88	42.79
360.0	105.17	88.62	73.40	64.60	57.35	49.98	44.95	39.25	35.48

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	32.27	28.95	26.74	24.85	23.25	21.53	20.43	19.37	18.49
45.0	37.53	34.15	31.27	28.78	26.13	24.36	22.92	21.59	20.26
90.0	34.26	31.22	28.17	26.07	24.36	22.47	21.26	20.15	18.93
135.0	38.08	33.49	30.56	28.06	25.91	23.69	22.20	20.92	19.60
180.0	47.33	42.51	37.53	34.04	31.22	28.78	26.18	24.36	22.86
225.0	41.63	36.70	33.32	30.44	27.51	25.46	23.75	21.92	20.65
270.0	45.22	40.74	36.92	32.82	30.17	27.84	25.41	23.75	22.31
315.0	38.58	35.04	31.94	28.78	26.63	24.74	23.14	21.42	20.31
360.0	32.27	28.95	26.74	24.85	23.25	21.53	20.43	19.37	18.49

C/γ(°)	54.0	55.0	56.0	57.0	58.0	59.0	60.0	61.0	62.0
0.0	17.49	16.77	16.11	15.39	14.83	14.34	13.78	13.34	13.01
45.0	19.32	18.27	17.49	16.83	16.05	15.50	14.95	14.45	13.89
90.0	18.05	17.10	16.44	15.83	15.28	14.72	14.17	13.73	13.34
135.0	18.71	17.82	17.10	16.27	15.67	15.11	14.50	14.00	13.51
180.0	21.26	20.15	19.15	18.05	17.33	16.50	15.89	15.33	14.78
225.0	19.60	18.60	17.55	16.83	16.22	15.55	14.89	14.28	13.84
270.0	20.76	19.65	18.71	17.82	16.88	16.27	15.61	15.06	14.45
315.0	19.32	18.10	17.38	16.44	15.83	15.22	14.72	14.12	13.67
360.0	17.49	16.77	16.11	15.39	14.83	14.34	13.78	13.34	13.01

C/γ(°)	63.0	64.0	65.0	66.0	67.0	68.0	69.0	70.0	71.0
0.0	12.57	12.23	11.90	11.57	11.18	10.90	10.68	10.41	10.07
45.0	13.45	13.12	12.79	12.34	12.01	11.73	11.29	11.02	10.74
90.0	12.95	12.51	12.18	11.90	11.46	11.18	10.85	10.52	10.30
135.0	13.17	12.79	12.45	12.07	11.79	11.51	11.18	10.85	10.57
180.0	14.23	13.78	13.34	12.95	12.51	12.18	11.85	11.51	11.18
225.0	13.40	12.90	12.51	12.18	11.90	11.46	11.18	10.90	10.63
270.0	14.00	13.45	13.01	12.57	12.23	11.90	11.62	11.24	10.90
315.0	13.23	12.84	12.40	12.12	11.73	11.35	11.07	10.79	10.52
360.0	12.57	12.23	11.90	11.57	11.18	10.90	10.68	10.41	10.07

C/γ(°)	72.0	73.0	74.0	75.0	76.0	77.0	78.0	79.0	80.0
0.0	9.80	9.52	9.19	8.97	8.69	8.41	8.19	7.97	7.75
45.0	10.35	10.07	9.74	9.52	9.24	8.97	8.69	8.41	8.19
90.0	9.96	9.69	9.41	9.13	8.86	8.58	8.36	8.14	7.92
135.0	10.30	9.96	9.69	9.47	9.13	8.91	8.64	8.36	8.14
180.0	10.90	10.52	10.24	9.96	9.63	9.35	9.08	8.86	8.52
225.0	10.30	10.07	9.80	9.47	9.24	8.97	8.75	8.41	8.19
270.0	10.63	10.41	10.07	9.80	9.52	9.30	8.97	8.69	8.47
315.0	10.24	9.96	9.63	9.41	9.13	8.91	8.58	8.36	8.14
360.0	9.80	9.52	9.19	8.97	8.69	8.41	8.19	7.97	7.75

C/γ(°)	81.0	82.0	83.0	84.0	85.0	86.0	87.0	88.0	89.0
0.0	7.58	7.42	7.25	7.03	6.92	6.75	6.59	6.42	6.42
45.0	7.97	7.75	7.53	7.36	7.14	6.97	6.81	6.64	6.48
90.0	7.69	7.53	7.31	7.14	6.92	6.81	6.64	6.48	6.42
135.0	7.86	7.69	7.53	7.31	7.09	6.92	6.81	6.64	6.48
180.0	8.30	8.03	7.86	7.64	7.42	7.20	7.03	6.86	6.75
225.0	7.97	7.80	7.64	7.36	7.20	7.03	6.86	6.75	6.59
270.0	8.19	7.97	7.75	7.58	7.31	7.14	6.92	6.81	6.59
315.0	7.86	7.64	7.47	7.31	7.14	6.97	6.81	6.64	6.48
360.0	7.58	7.42	7.25	7.03	6.92	6.75	6.59	6.42	6.42

Intensity data(cd)

C/γ(°)	90.0
0.0	6.42
45.0	6.48
90.0	6.42
135.0	6.42
180.0	6.53
225.0	6.42
270.0	6.48
315.0	6.42
360.0	6.42