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

NT

Client:
LumCAT: 1-1380-L
Luminaire: 92.70.427.00
Report No: 20231120-B008
Ballast type: AC

Test No: 20231120-C008	Voltage(V): 36.530
LampCAT: P2121-018-1203-P3090-1	Current(A): 0.399
Lamp flux(lm): 2085.4	Power (W): 14.575
Number of Lamps: 1	PF: 0.000
Length(mm): 0	Width(mm): 0
Phm Type: C	Height(mm): 0

Photometric Results

Lumens(lm): 1943.03, Efficiency(%): 93.18% , Luminous Efficacy(lm/W): 133.31
Central intensity(cd): 2836.457, Maximum intensity(cd): 2836.457
Angle of maximum intensity: C=0.0 γ=0.0
Beam Angle(50%Imax): [C0/180]Total=51.8
[C90/270]Total=51.8
Field angle(10%Imax): [C0/180]Total=69.4
[C90/270]Total=69.4
Beam angle of C0 plane : 51.73
Aveage BeamAngle(IEC 61341):51.73
Maximum s/h(1/2): C0_180=0.86 C90_270=0.86
Maximum s/h(1/4): C0_180=0.77 C90_270=0.77
Up flux rate of lamp(%): 0.00%
Down flux rate of lamp(%): 93.18%
Up flux rate of LUM(%): - -
Down flux rate of LUM(%): 100.00%
CIE Type : Direct lighting
Output flux ratio in π solid angle : 98.048%

Zonal flux distribution table

γ(°)	Average I(cd)	Zonal F(lm)	Sum F(lm)	Eff Flux(%)	Eff Sum(%)
0.0	2836.457	0.000	0	0.00%	0.00%
1.0	2833.482	2.713	2.713	0.13%	0.14%
2.0	2826.632	8.124	10.837	0.39%	0.56%
3.0	2819.366	13.503	24.34	0.65%	1.25%
4.0	2811.271	18.848	43.188	0.90%	2.22%
5.0	2799.854	24.139	67.327	1.16%	3.47%
6.0	2784.286	29.346	96.673	1.41%	4.98%
7.0	2758.754	34.406	131.078	1.65%	6.75%
8.0	2731.493	39.293	170.371	1.88%	8.77%
9.0	2700.702	44.025	214.396	2.11%	11.03%
10.0	2665.414	48.561	262.957	2.33%	13.53%
11.0	2618.225	52.794	315.752	2.53%	16.25%
12.0	2570.690	56.722	372.474	2.72%	19.17%
13.0	2529.383	60.525	432.999	2.90%	22.28%
14.0	2493.472	64.292	497.291	3.08%	25.59%
15.0	2456.247	67.952	565.243	3.26%	29.09%
16.0	2412.933	71.347	636.59	3.42%	32.76%
17.0	2360.623	74.337	710.927	3.56%	36.59%
18.0	2297.105	76.796	787.723	3.68%	40.54%
19.0	2228.121	78.730	866.453	3.78%	44.59%
20.0	2147.166	80.080	946.533	3.84%	48.71%
21.0	2065.450	80.891	1027.423	3.88%	52.88%
22.0	1963.946	80.972	1108.396	3.88%	57.04%
23.0	1855.729	80.147	1188.543	3.84%	61.17%
24.0	1731.391	78.427	1266.97	3.76%	65.21%
25.0	1575.156	75.184	1342.154	3.61%	69.08%
26.0	1393.451	70.074	1412.228	3.36%	72.68%
27.0	1226.615	64.100	1476.329	3.07%	75.98%
28.0	1121.900	59.459	1535.788	2.85%	79.04%
29.0	969.594	54.719	1590.507	2.62%	81.86%
30.0	815.165	48.188	1638.696	2.31%	84.34%
31.0	673.238	41.420	1680.116	1.99%	86.47%
32.0	535.498	34.629	1714.745	1.66%	88.25%
33.0	428.382	28.396	1743.141	1.36%	89.71%
34.0	335.443	23.116	1766.256	1.11%	90.90%
35.0	262.314	18.564	1784.821	0.89%	91.86%
36.0	231.897	15.736	1800.556	0.75%	92.67%
37.0	200.415	14.100	1814.656	0.68%	93.39%

Zonal flux distribution table

γ(°)	Average I(cd)	Zonal F(lm)	Sum F(lm)	Eff Flux(%)	Eff Sum(%)
38.0	137.159	11.268	1825.924	0.54%	93.97%
39.0	114.845	8.602	1834.525	0.41%	94.42%
40.0	97.388	7.402	1841.927	0.35%	94.80%
41.0	84.435	6.475	1848.402	0.31%	95.13%
42.0	73.593	5.741	1854.143	0.28%	95.43%
43.0	64.937	5.132	1859.275	0.25%	95.69%
44.0	57.298	4.613	1863.888	0.22%	95.93%
45.0	50.787	4.154	1868.042	0.20%	96.14%
46.0	45.584	3.769	1871.811	0.18%	96.33%
47.0	41.294	3.455	1875.266	0.17%	96.51%
48.0	37.398	3.181	1878.447	0.15%	96.68%
49.0	34.243	2.942	1881.389	0.14%	96.83%
50.0	31.531	2.742	1884.132	0.13%	96.97%
51.0	29.144	2.567	1886.699	0.12%	97.10%
52.0	27.213	2.418	1889.117	0.12%	97.23%
53.0	25.511	2.294	1891.411	0.11%	97.34%
54.0	24.086	2.186	1893.597	0.10%	97.46%
55.0	22.792	2.093	1895.689	0.10%	97.56%
56.0	21.733	2.012	1897.701	0.10%	97.67%
57.0	20.723	1.941	1899.642	0.09%	97.77%
58.0	19.830	1.875	1901.518	0.09%	97.86%
59.0	19.000	1.815	1903.333	0.09%	97.96%
60.0	18.301	1.762	1905.095	0.08%	98.05%
61.0	17.651	1.716	1906.811	0.08%	98.14%
62.0	17.035	1.671	1908.482	0.08%	98.22%
63.0	16.475	1.630	1910.112	0.08%	98.31%
64.0	15.963	1.592	1911.704	0.08%	98.39%
65.0	15.513	1.558	1913.261	0.07%	98.47%
66.0	15.042	1.525	1914.786	0.07%	98.55%
67.0	14.620	1.492	1916.277	0.07%	98.62%
68.0	14.191	1.459	1917.737	0.07%	98.70%
69.0	13.811	1.429	1919.165	0.07%	98.77%
70.0	13.444	1.400	1920.565	0.07%	98.84%
71.0	13.091	1.371	1921.937	0.07%	98.91%
72.0	12.731	1.343	1923.279	0.06%	98.98%
73.0	12.392	1.314	1924.593	0.06%	99.05%
74.0	12.074	1.286	1925.879	0.06%	99.12%
75.0	11.714	1.257	1927.136	0.06%	99.18%

Zonal flux distribution table

γ(°)	Average I(cd)	Zonal F(lm)	Sum F(lm)	Eff Flux(%)	Eff Sum(%)
76.0	11.410	1.228	1928.364	0.06%	99.25%
77.0	11.091	1.200	1929.563	0.06%	99.31%
78.0	10.787	1.171	1930.735	0.06%	99.37%
79.0	10.483	1.143	1931.877	0.05%	99.43%
80.0	10.213	1.116	1932.993	0.05%	99.48%
81.0	9.991	1.093	1934.086	0.05%	99.54%
82.0	9.756	1.071	1935.157	0.05%	99.59%
83.0	9.548	1.049	1936.206	0.05%	99.65%
84.0	9.334	1.029	1937.235	0.05%	99.70%
85.0	9.133	1.008	1938.243	0.05%	99.75%
86.0	8.974	0.990	1939.232	0.05%	99.80%
87.0	8.808	0.973	1940.206	0.05%	99.85%
88.0	8.656	0.957	1941.162	0.05%	99.90%
89.0	8.490	0.940	1942.102	0.05%	99.95%
90.0	8.435	0.928	1943.03	0.04%	100.00%

Zonal flux distribution table

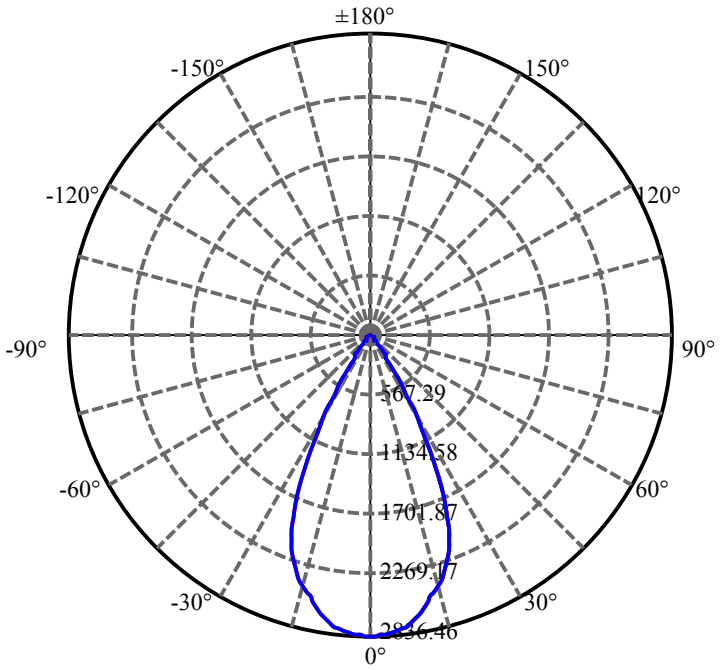
ZONAL LUMEN SUMMARY

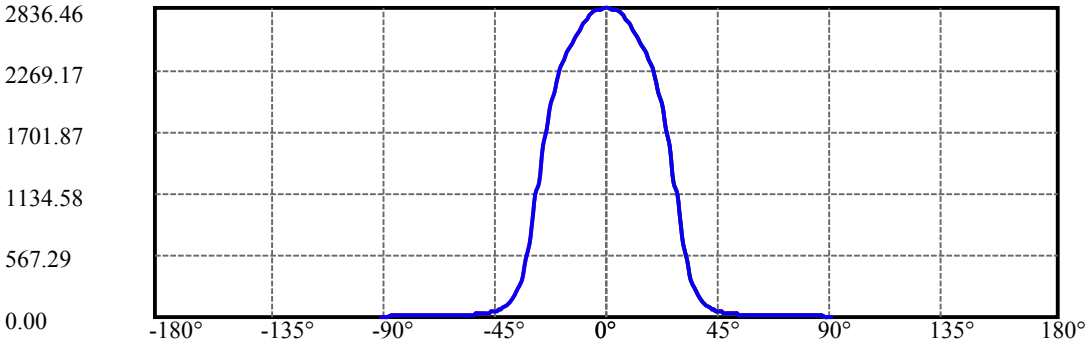
Zone	Lumens	%Lamp	%Fixt
0-30	1638.70	78.58%	84.34%
0-40	1841.93	88.33%	94.80%
0-60	1905.10	91.36%	98.05%
0-90	1942.10	93.13%	99.95%
0-120	1942.10	93.13%	99.95%
0-180	1943.03	93.18%	100.00%
60-90	37.01	1.77%	1.90%
90-120	0.00	0.00%	0.00%
90-130	0.00	0.00%	0.00%
90-150	0.00	0.00%	0.00%
90-180	0.00	0.00%	0.00%
0-28.34	1554.42	74.54%	80.00%

ZONAL LUMEN SUMMARY

0-10	262.96
10-20	683.58
20-30	692.16
30-40	203.23
40-50	42.20
50-60	20.96
60-70	15.47
70-80	12.43
80-90	9.11
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):

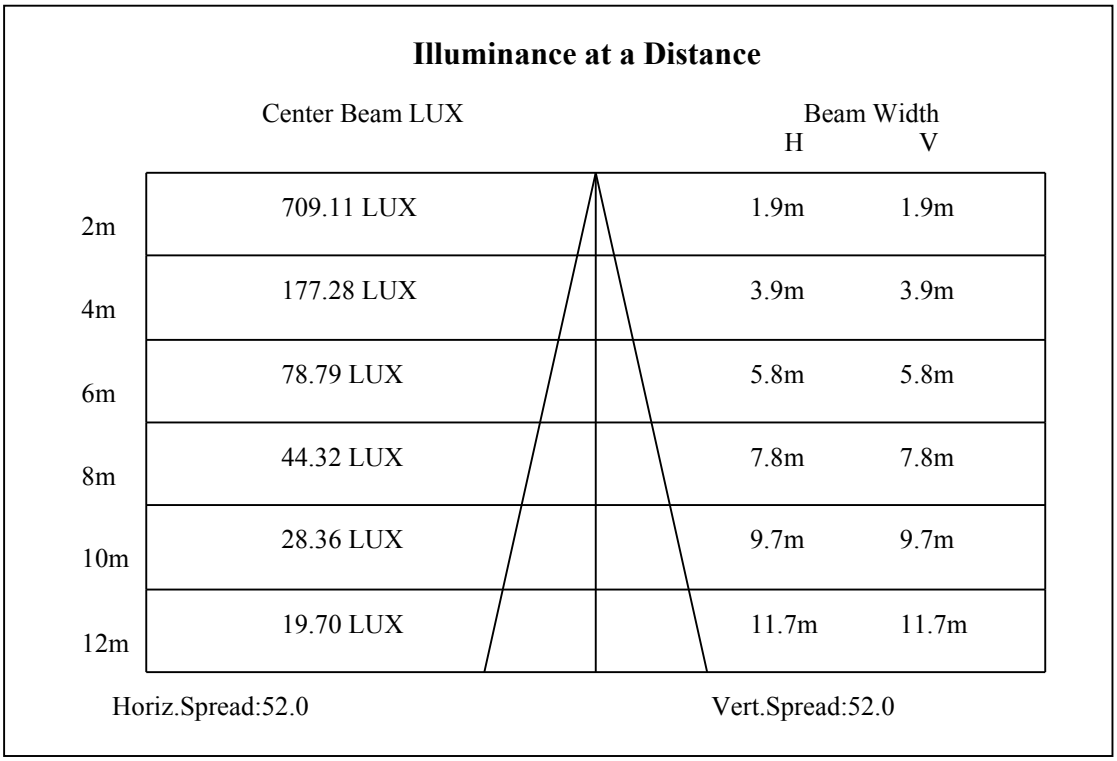
C0/C180:

C90/C270:

Field angle(10%Imax):C0/180Left:34.7 Right:34.7
:C90/270Left:34.7 Right:34.7

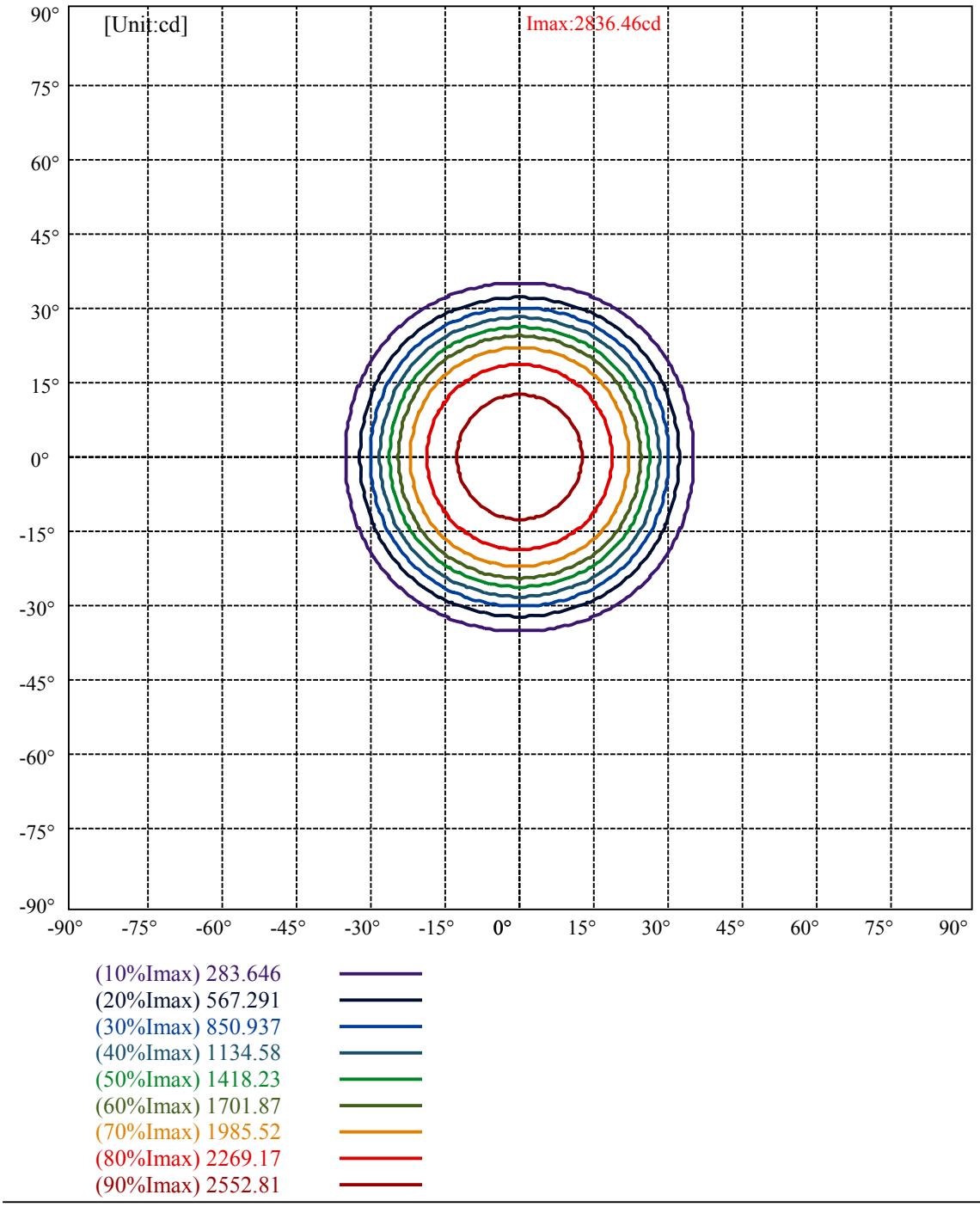
Beam Angle(50%Imax):C0/180Left:25.9 Right:25.9
:C90/270Left:25.9 Right:25.9

Lux distance Curve



Equipment: GMS1980 Date: 2023/11/20 Operator: NT07
Temperature(°C): 0.0 Humidity(%): 0.0% Distance(m): 7.44

ISO-Intensity(V-H)

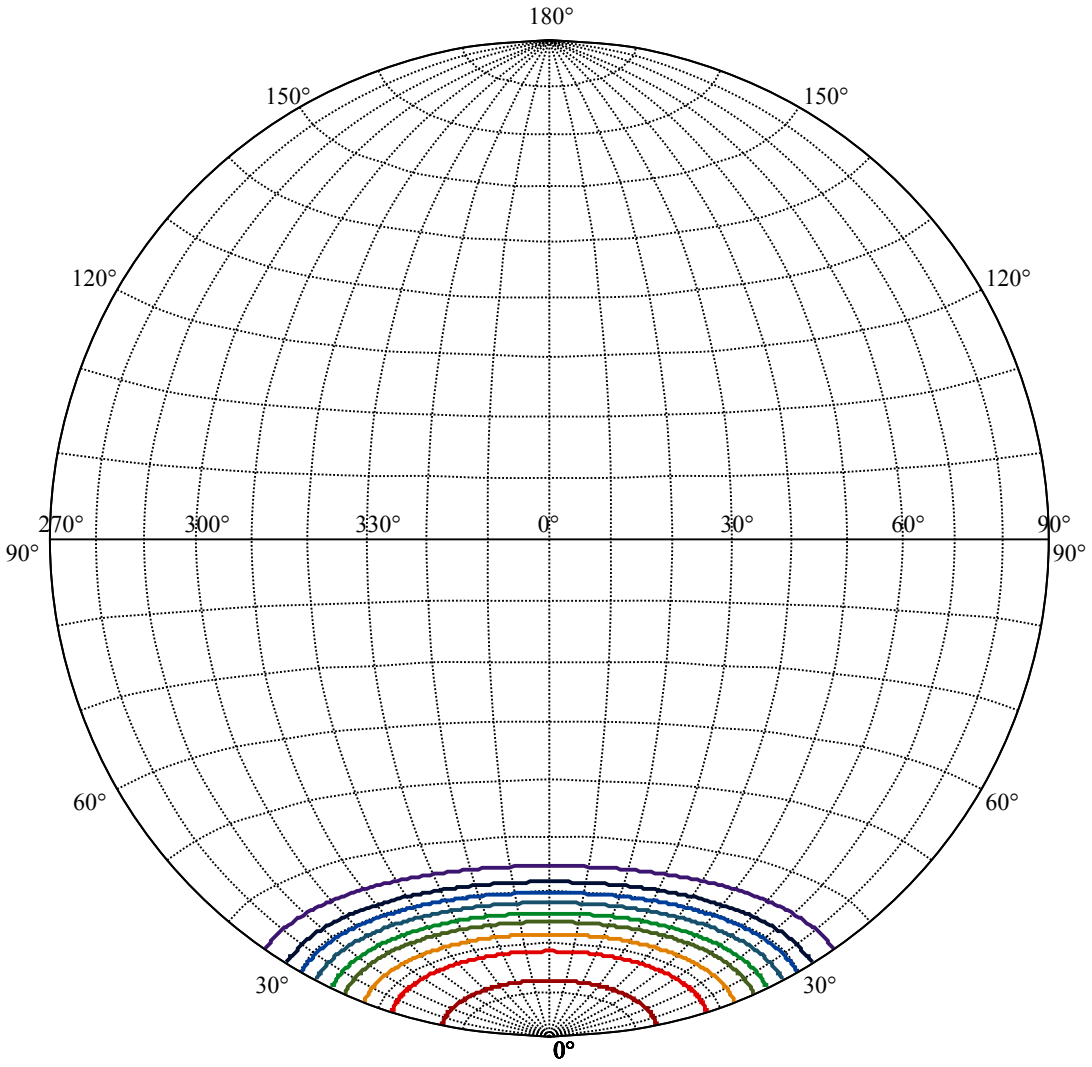


Equipment: GMS1980
Temperature(°C): 0.0

Date: 2023/11/20
Humidity(%): 0.0%

Operator: NT07
Distance(m): 7.44

ISO candela diagram on circular web



[Unit:cd]

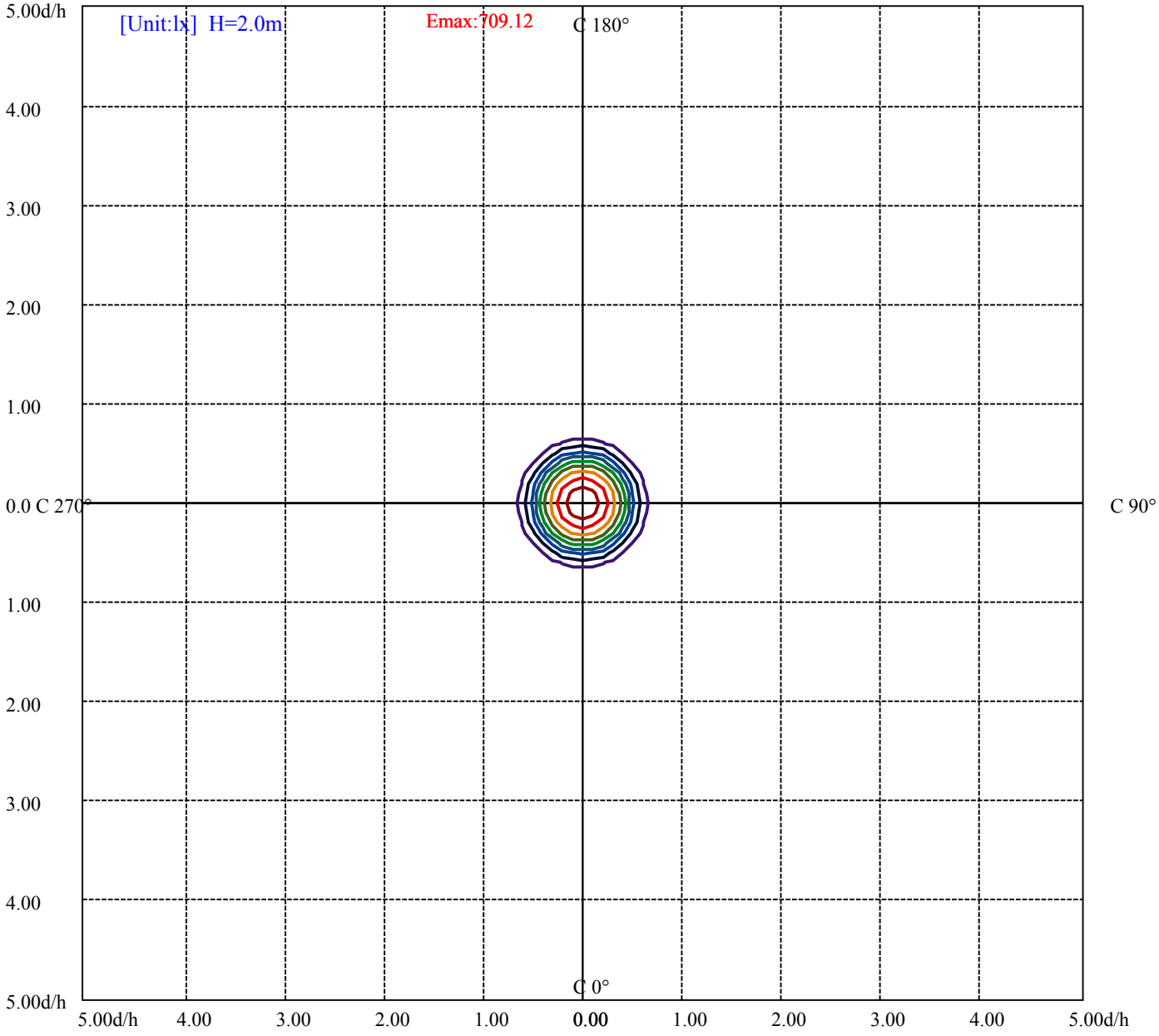
Imax:2836.46

(10%Imax) 283.646
(20%Imax) 567.291
(30%Imax) 850.937
(40%Imax) 1134.58
(50%Imax) 1418.23
(60%Imax) 1701.87
(70%Imax) 1985.52
(80%Imax) 2269.17
(90%Imax) 2552.81

Equipment: GMS1980	Date: 2023/11/20	Operator: NT07
Temperature(°C): 0.0	Humidity(%): 0.0%	Distance(m): 7.44

NT 1-1380-L

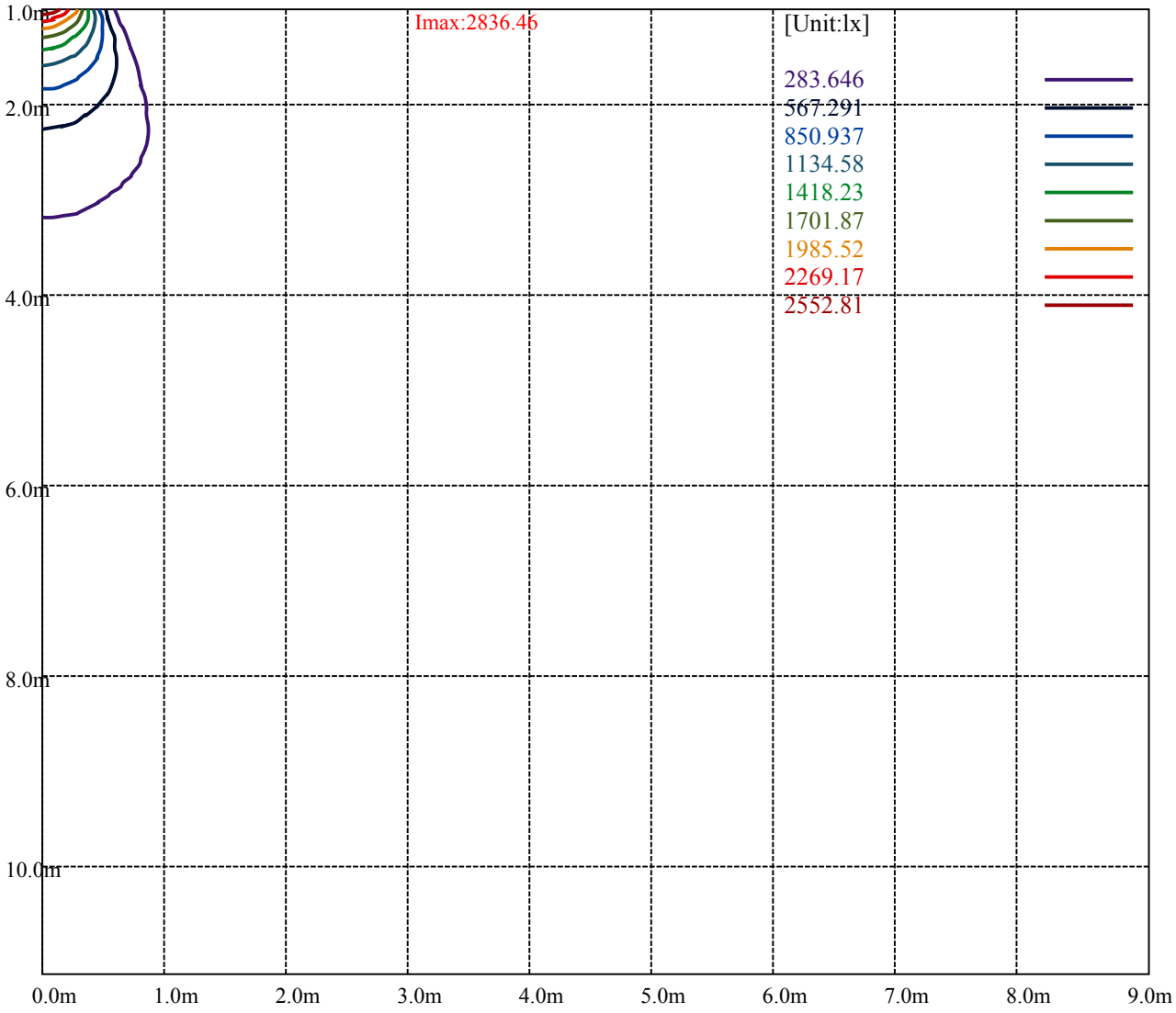
ISO illuminance diagram



(10%Emax) 70.9115
(20%Emax) 141.8228
(30%Emax) 212.7343
(40%Emax) 283.645
(50%Emax) 354.5575
(60%Emax) 425.4675
(70%Emax) 496.38
(80%Emax) 567.2925
(90%Emax) 638.2025

Equipment: GMS1980
Temperature(°C): 0.0
Date: 2023/11/20
Humidity(%): 0.0%
Operator: NT07
Distance(m): 7.44

Space ISO Lux diagram



Equipment: GMS1980
Temperature(°C): 0.0

Date: 2023/11/20
Humidity(%): 0.0%

Operator: NT07
Distance(m): 7.44

NT 1-1380-L

Luminance Limitting Curve(no luminous side)

Luminance Table

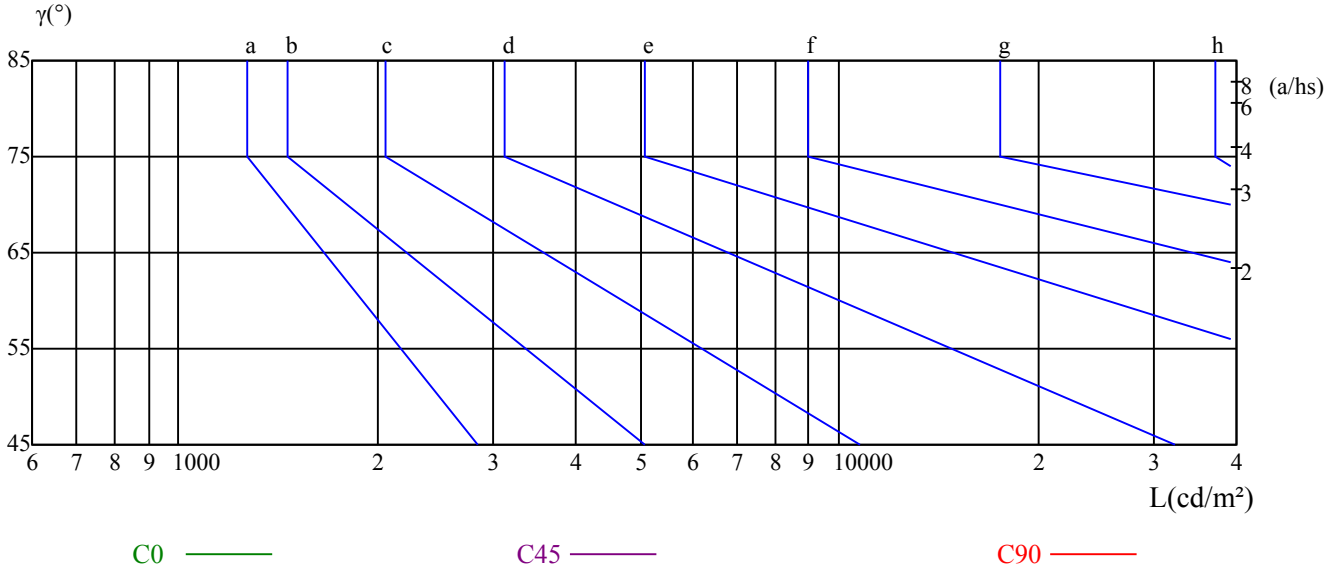
γ	45	50	55	60	65	70	75	80	85
C0	0	0	0	0	0	0	0	0	0
C45	0	0	0	0	0	0	0	0	0
C90	0	0	0	0	0	0	0	0	0

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

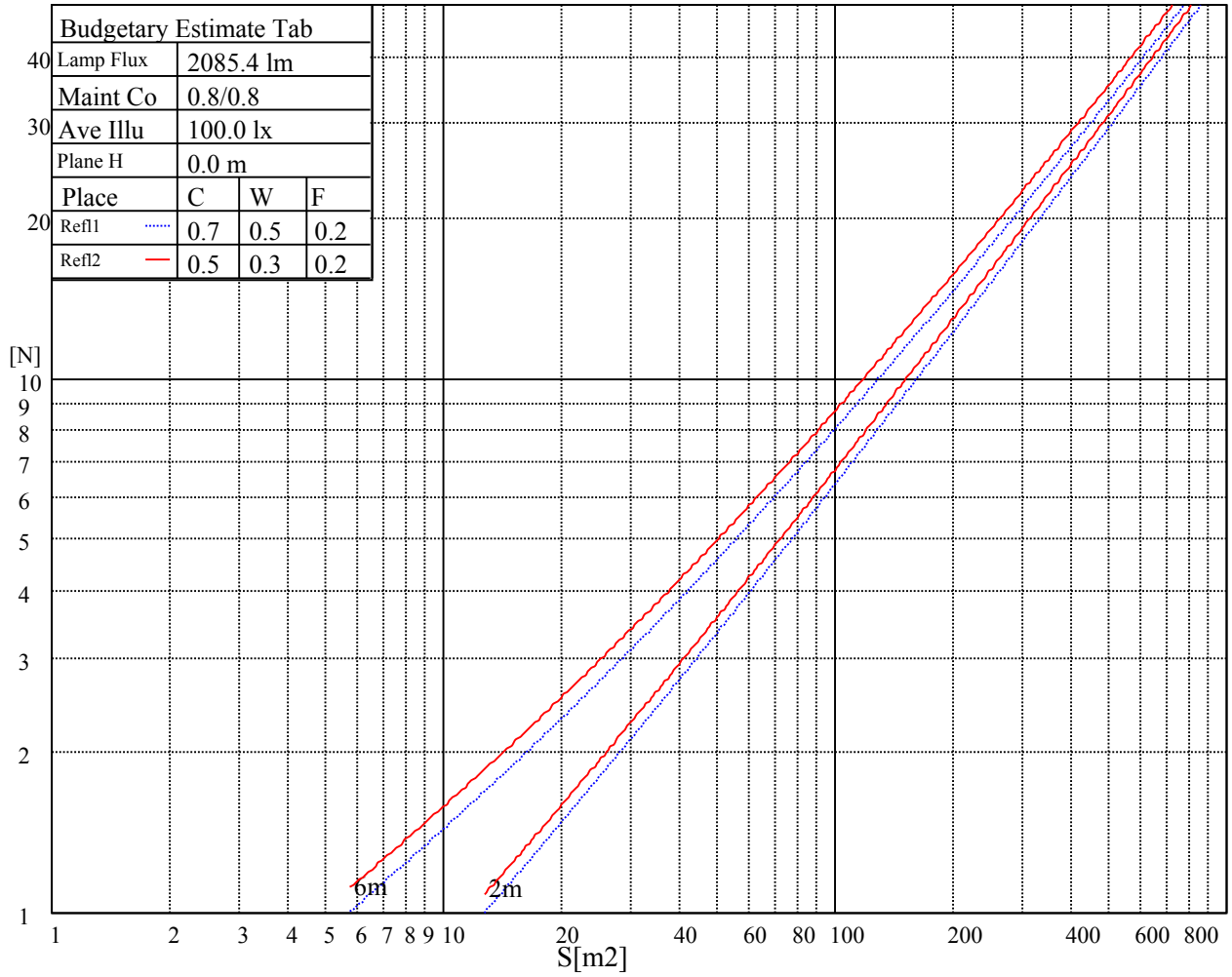
Luminance Limitting Curve



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

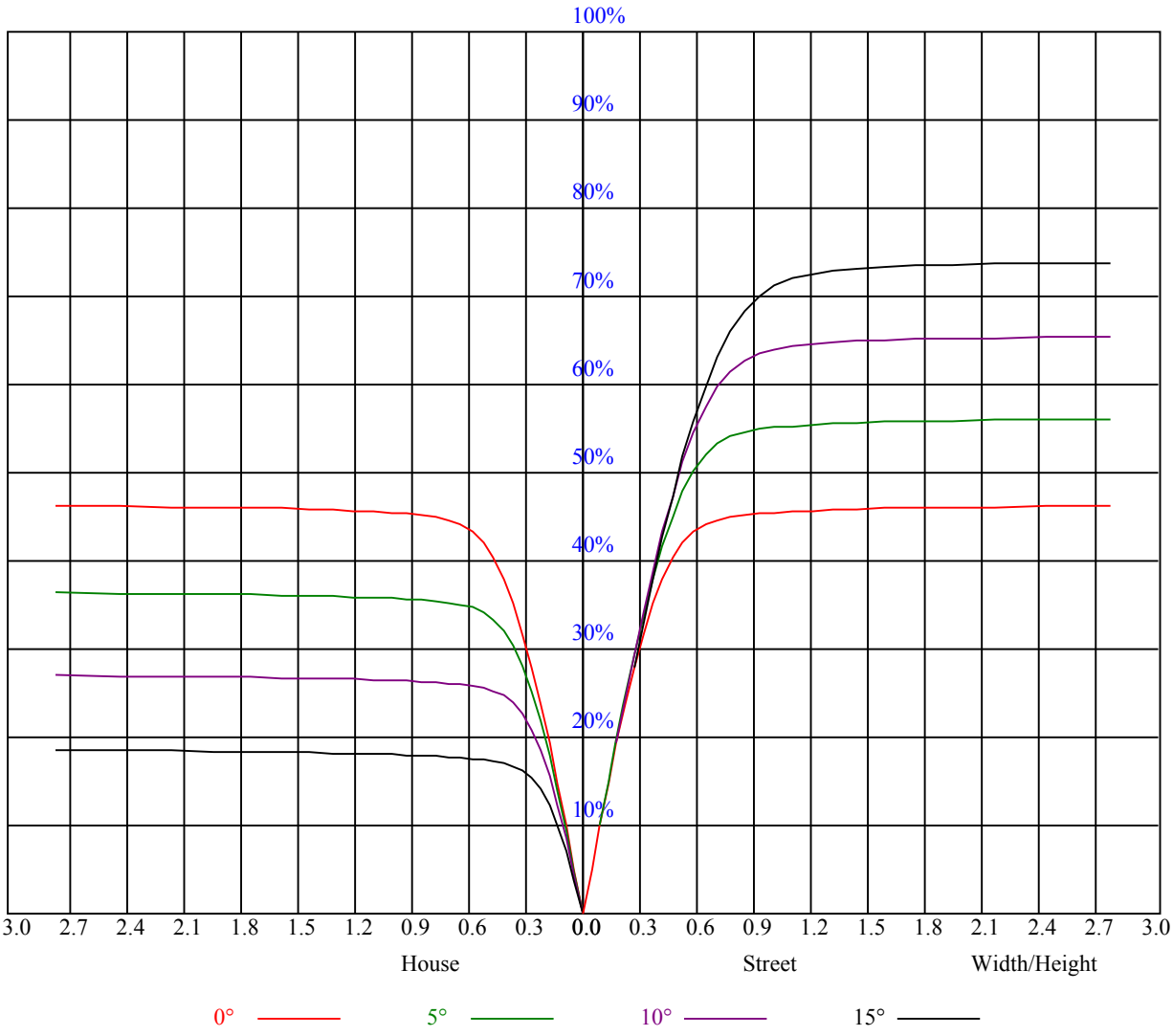


Equipment: GMS1980 Date: 2023/11/20 Operator: NT07
Temperature(°C): 0.0 Humidity(%): 0.0% Distance(m): 7.44

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	1.11	1.11	1.11	1.08	1.08	1.08	1.04	1.04	1.04	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	0.84	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	0.60	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	0.64	0.60	0.57	0.64	0.60	0.57	0.63	0.59	0.57	0.56
10	0.63	0.58	0.54	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
Temperature(°C): 0.0

Date: 2023/11/20
Humidity(%): 0.0%

Operator: NT07
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	2828.02	2819.71	2806.98	2794.25	2785.95	2773.22	2751.07	2727.83	2697.93
45.0	2825.25	2830.23	2836.32	2841.85	2832.44	2819.16	2806.98	2785.39	2763.81
90.0	2852.37	2852.37	2840.75	2829.68	2822.48	2808.09	2802.55	2780.96	2763.81
135.0	2840.19	2842.41	2846.28	2841.85	2840.75	2831.89	2812.52	2787.61	2768.79
180.0	2828.02	2825.80	2816.94	2817.50	2815.84	2809.75	2803.11	2792.04	2768.79
225.0	2825.25	2813.62	2803.11	2794.80	2783.18	2768.79	2748.31	2720.63	2681.88
270.0	2852.37	2842.96	2836.87	2826.91	2809.75	2792.04	2772.11	2738.90	2708.45
315.0	2840.19	2840.75	2825.80	2808.09	2799.79	2795.91	2777.64	2736.68	2698.49
360.0	2828.02	2819.71	2806.98	2794.25	2785.95	2773.22	2751.07	2727.83	2697.93

C/γ(°)	9.0	10.0	11.0	12.0	13.0	14.0	15.0	16.0	17.0
0.0	2658.08	2627.08	2589.44	2555.12	2511.95	2479.29	2438.33	2388.51	2312.67
45.0	2738.90	2711.77	2665.83	2614.35	2572.28	2540.73	2513.05	2467.11	2426.15
90.0	2722.84	2681.88	2642.58	2591.10	2541.28	2508.07	2463.79	2422.27	2364.71
135.0	2747.20	2706.24	2651.44	2619.33	2580.03	2533.53	2498.66	2446.08	2387.40
180.0	2736.68	2715.09	2679.11	2623.21	2587.23	2539.07	2509.18	2479.29	2439.43
225.0	2655.31	2607.15	2547.37	2505.86	2467.11	2435.00	2401.79	2361.94	2317.10
270.0	2673.58	2639.81	2591.10	2527.45	2474.86	2436.67	2400.69	2358.62	2311.57
315.0	2673.03	2634.28	2578.92	2529.11	2500.32	2475.41	2424.49	2379.65	2325.96
360.0	2658.08	2627.08	2589.44	2555.12	2511.95	2479.29	2438.33	2388.51	2312.67

C/γ(°)	18.0	19.0	20.0	21.0	22.0	23.0	24.0	25.0	26.0
0.0	2235.73	2132.77	2044.21	1951.77	1812.28	1684.41	1537.17	1252.65	1068.82
45.0	2377.44	2319.32	2241.27	2166.54	2082.40	1962.29	1853.79	1724.26	1550.45
90.0	2289.98	2220.23	2149.93	2065.24	1950.66	1843.83	1708.77	1570.38	1263.72
135.0	2321.53	2251.23	2144.40	2062.48	1968.93	1864.31	1714.30	1579.79	1436.43
180.0	2378.54	2320.42	2244.59	2163.22	2050.30	1951.21	1847.15	1694.93	1559.86
225.0	2250.12	2183.70	2110.63	2033.69	1929.63	1835.53	1695.48	1565.95	1424.80
270.0	2266.18	2215.80	2154.36	2081.30	2007.12	1927.97	1838.85	1694.93	1569.83
315.0	2257.32	2181.49	2087.94	1999.37	1910.25	1776.30	1655.63	1518.35	1273.69
360.0	2235.73	2132.77	2044.21	1951.77	1812.28	1684.41	1537.17	1252.65	1068.82

C/γ(°)	27.0	28.0	29.0	30.0	31.0	32.0	33.0	34.0	35.0
0.0	1068.82	925.90	759.56	633.47	512.74	409.06	317.84	235.86	191.19
45.0	1403.77	1211.69	1062.79	918.87	779.93	615.53	498.18	398.55	316.07
90.0	1067.49	1067.49	918.04	739.75	608.89	462.98	364.56	287.06	216.16
135.0	1244.90	1097.11	953.74	786.02	659.81	515.34	415.15	330.46	279.54
180.0	1421.48	1247.12	1105.41	926.07	786.02	656.49	533.61	406.30	322.16
225.0	1087.31	1087.31	942.23	798.92	629.15	508.31	403.08	317.18	239.63
270.0	1427.57	1281.99	1099.32	949.31	802.63	632.14	511.47	405.74	303.89
315.0	1091.57	1056.59	915.66	768.92	606.73	484.12	383.16	302.40	229.88
360.0	1068.82	925.90	759.56	633.47	512.74	409.06	317.84	235.86	191.19

C/γ(°)	36.0	37.0	38.0	39.0	40.0	41.0	42.0	43.0	44.0
0.0	157.92	126.54	108.22	90.45	79.43	70.35	60.61	54.03	48.32
45.0	282.30	282.30	154.60	128.53	103.84	89.12	77.72	66.98	59.45
90.0	174.92	144.53	121.61	100.52	87.29	76.66	67.92	58.79	52.64
135.0	279.54	164.46	138.33	119.56	100.91	88.79	78.82	70.47	61.28
180.0	288.95	288.95	161.47	135.12	115.08	99.80	85.08	75.39	67.14
225.0	194.01	158.59	130.69	105.95	91.28	79.60	68.31	60.83	52.75
270.0	287.29	287.29	155.27	130.03	110.93	92.11	80.54	71.24	63.38
315.0	190.25	150.67	127.09	108.60	90.34	79.04	69.75	61.77	53.42
360.0	157.92	126.54	108.22	90.45	79.43	70.35	60.61	54.03	48.32

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	43.40	38.36	35.15	32.44	30.06	28.01	25.96	24.52	22.97
45.0	51.76	46.66	42.29	38.42	34.49	31.72	29.50	27.57	25.63
90.0	47.38	41.96	38.30	35.20	31.88	29.67	27.34	25.74	24.36
135.0	55.08	49.82	44.28	40.35	37.09	33.60	31.33	29.34	27.23
180.0	58.34	52.36	47.33	41.90	38.36	35.20	31.88	29.67	27.73
225.0	47.33	42.73	38.86	34.82	32.05	29.78	27.73	25.68	24.24
270.0	55.13	49.65	44.89	40.80	37.47	33.99	31.61	29.06	27.29
315.0	47.88	43.12	39.25	35.26	32.55	30.28	27.79	26.13	24.63
360.0	43.40	38.36	35.15	32.44	30.06	28.01	25.96	24.52	22.97

C/γ(°)	54.0	55.0	56.0	57.0	58.0	59.0	60.0	61.0	62.0
0.0	21.86	20.92	19.82	19.10	18.38	17.60	17.05	16.55	16.11
45.0	24.24	23.08	22.03	20.87	19.98	19.04	18.38	17.77	17.05
90.0	23.14	21.75	20.81	19.93	19.15	18.32	17.71	17.16	16.61
135.0	25.79	24.52	23.36	22.09	21.09	20.26	19.32	18.60	17.93
180.0	26.07	24.30	23.03	21.98	21.03	19.93	19.15	18.32	17.71
225.0	23.03	21.64	20.76	19.87	18.93	18.32	17.71	16.99	16.44
270.0	25.46	24.13	23.03	22.03	20.87	20.04	19.26	18.65	17.82
315.0	23.08	21.98	21.03	19.93	19.21	18.49	17.82	17.16	16.61
360.0	21.86	20.92	19.82	19.10	18.38	17.60	17.05	16.55	16.11

C/γ(°)	63.0	64.0	65.0	66.0	67.0	68.0	69.0	70.0	71.0
0.0	15.55	15.17	14.78	14.39	13.95	13.62	13.23	12.90	12.62
45.0	16.61	16.05	15.61	15.17	14.72	14.39	14.00	13.56	13.23
90.0	16.05	15.61	15.11	14.67	14.28	13.78	13.45	13.12	12.79
135.0	17.21	16.72	16.27	15.67	15.22	14.78	14.34	13.84	13.45
180.0	17.10	16.44	16.00	15.50	15.11	14.61	14.17	13.89	13.51
225.0	15.94	15.39	15.00	14.61	14.23	13.78	13.45	13.17	12.79
270.0	17.21	16.66	16.22	15.61	15.17	14.67	14.28	13.89	13.45
315.0	16.11	15.67	15.11	14.72	14.28	13.89	13.56	13.17	12.90
360.0	15.55	15.17	14.78	14.39	13.95	13.62	13.23	12.90	12.62

C/γ(°)	72.0	73.0	74.0	75.0	76.0	77.0	78.0	79.0	80.0
0.0	12.23	11.96	11.68	11.29	11.02	10.79	10.46	10.19	9.91
45.0	12.90	12.57	12.23	11.90	11.57	11.24	10.90	10.63	10.35
90.0	12.40	12.07	11.79	11.46	11.13	10.79	10.52	10.24	9.96
135.0	13.12	12.73	12.34	11.96	11.68	11.24	10.96	10.63	10.30
180.0	13.06	12.73	12.40	11.96	11.62	11.35	10.96	10.63	10.35
225.0	12.45	12.18	11.73	11.46	11.18	10.85	10.57	10.30	10.07
270.0	13.12	12.73	12.45	12.07	11.73	11.46	11.18	10.79	10.52
315.0	12.57	12.18	11.96	11.62	11.35	11.02	10.74	10.46	10.24
360.0	12.23	11.96	11.68	11.29	11.02	10.79	10.46	10.19	9.91

C/γ(°)	81.0	82.0	83.0	84.0	85.0	86.0	87.0	88.0	89.0
0.0	9.74	9.52	9.30	9.13	8.97	8.86	8.69	8.52	8.36
45.0	10.13	9.85	9.63	9.35	9.19	9.02	8.86	8.69	8.41
90.0	9.85	9.63	9.35	9.19	9.02	8.91	8.69	8.52	8.41
135.0	10.07	9.91	9.69	9.41	9.19	9.02	8.86	8.75	8.47
180.0	10.07	9.85	9.69	9.47	9.24	9.02	8.91	8.75	8.69
225.0	9.80	9.58	9.47	9.19	9.02	8.91	8.75	8.58	8.41
270.0	10.30	9.96	9.74	9.58	9.30	9.08	8.91	8.75	8.58
315.0	9.96	9.74	9.52	9.35	9.13	8.97	8.80	8.69	8.58
360.0	9.74	9.52	9.30	9.13	8.97	8.86	8.69	8.52	8.36

Intensity data(cd)

C/γ(°)	90.0
0.0	8.36
45.0	8.36
90.0	8.58
135.0	8.64
180.0	8.30
225.0	8.36
270.0	8.47
315.0	8.41
360.0	8.36