NATA LIGHTING CO .LED
www.nata.cn
Email:info@nata.cn
Tel:+86 0750-377 0000（10 lines） Fax:+86 0750-377 1111
Address:380 JinOu Road, JiangMen City, GuangDong, China 529040

NT

Client: NT
LumCAT: 2-2883-L
Luminaire: 90.70.412.00 LED HOLDER
Report No: 20250321-B005
Ballast type: AC

Test No: 20250321-C005	Voltage(V): 35.730
LampCAT: LUMILEDS LUXEON COB 1205	Current(A): 0.599
Lamp flux(lm): 2390.9	Power (W): 21.400
Number of Lamps: 1	PF: 0.000
Length(mm): 63	Width(mm): 63
Phm Type: C	Height(mm): 40

Photometric Results

Lumens(lm): 2315.23, Efficiency(%): 96.84% , Luminous Efficacy(lm/W): 108.19
Central intensity(cd): 11847.060, Maximum intensity(cd): 12262.720
Angle of maximum intensity: C=180.0 γ=2.0
Beam Angle(50%Imax): [C0/180]Total=18.4
[C90/270]Total=18.3
Field angle(10%Imax): [C0/180]Total=45.4
[C90/270]Total=45.2
Maximum s/h(1/2): C0_180=0.39 C90_270=0.28
Maximum s/h(1/4): C0_180=0.39 C90_270=0.31
Up flux rate of lamp(%): 0.00%
Down flux rate of lamp(%): 96.74%
Up flux rate of LUM(%): - -
Down flux rate of LUM(%): 100.00%
CIE Type : Direct lighting
Output flux ratio in π solid angle : 99.594%

Equipment: GMS 1800	Date: 2025/3/4	Operator: NT
Temperature(°C): 25.0	Humidity(%): 60.0%	Distance(m): 7.30

Zonal flux distribution table

γ(°)	Average I(cd)	Zonal F(lm)	Sum F(lm)	Eff Flux(%)	Eff Sum(%)
0.0	12068.213	0.000	0	0.00%	0.00%
1.0	11861.848	11.450	11.45	0.48%	0.49%
2.0	11469.700	33.488	44.938	1.40%	1.94%
3.0	11266.665	54.378	99.316	2.27%	4.29%
4.0	10612.797	73.238	172.553	3.06%	7.45%
5.0	9957.396	88.492	261.045	3.70%	11.28%
6.0	9044.139	99.858	360.903	4.18%	15.59%
7.0	8077.592	106.274	467.178	4.44%	20.18%
8.0	7125.899	108.808	575.986	4.55%	24.88%
9.0	6319.421	108.967	684.953	4.56%	29.58%
10.0	5446.864	106.481	791.434	4.45%	34.18%
11.0	4753.694	101.925	893.358	4.26%	38.59%
12.0	4105.955	96.849	990.207	4.05%	42.77%
13.0	3577.917	91.188	1081.395	3.81%	46.71%
14.0	3098.507	85.458	1166.853	3.57%	50.40%
15.0	2729.407	80.008	1246.861	3.35%	53.85%
16.0	2407.935	75.276	1322.137	3.15%	57.11%
17.0	2212.961	71.960	1394.097	3.01%	60.21%
18.0	1927.126	68.261	1462.358	2.86%	63.16%
19.0	1701.110	63.124	1525.482	2.64%	65.89%
20.0	1540.974	59.339	1584.821	2.48%	68.45%
21.0	1401.620	56.504	1641.325	2.36%	70.89%
22.0	1265.411	53.595	1694.92	2.24%	73.21%
23.0	1183.744	51.390	1746.31	2.15%	75.43%
24.0	1090.413	49.721	1796.031	2.08%	77.57%
25.0	1032.540	48.271	1844.302	2.02%	79.66%
26.0	971.843	47.314	1891.616	1.98%	81.70%
27.0	914.290	46.145	1937.761	1.93%	83.70%
28.0	855.797	44.815	1982.576	1.87%	85.63%
29.0	794.727	43.182	2025.758	1.81%	87.50%
30.0	726.349	41.069	2066.827	1.72%	89.27%
31.0	651.910	38.355	2105.182	1.60%	90.93%
32.0	576.058	35.180	2140.362	1.47%	92.45%
33.0	498.088	31.645	2172.006	1.32%	93.81%
34.0	406.869	27.387	2199.393	1.15%	95.00%
35.0	341.922	23.255	2222.648	0.97%	96.00%
36.0	274.050	19.613	2242.26	0.82%	96.85%
37.0	200.470	15.476	2257.737	0.65%	97.52%

Zonal flux distribution table

γ(°)	Average I(cd)	Zonal F(lm)	Sum F(lm)	Eff Flux(%)	Eff Sum(%)
38.0	137.555	11.283	2269.019	0.47%	98.00%
39.0	99.299	8.084	2277.104	0.34%	98.35%
40.0	46.749	5.094	2282.198	0.21%	98.57%
41.0	27.991	2.661	2284.859	0.11%	98.69%
42.0	17.979	1.670	2286.529	0.07%	98.76%
43.0	15.401	1.236	2287.766	0.05%	98.81%
44.0	14.188	1.117	2288.882	0.05%	98.86%
45.0	13.189	1.052	2289.935	0.04%	98.91%
46.0	12.237	0.994	2290.929	0.04%	98.95%
47.0	11.571	0.947	2291.876	0.04%	98.99%
48.0	11.138	0.918	2292.794	0.04%	99.03%
49.0	10.791	0.901	2293.694	0.04%	99.07%
50.0	10.558	0.890	2294.584	0.04%	99.11%
51.0	10.298	0.882	2295.467	0.04%	99.15%
52.0	10.085	0.875	2296.341	0.04%	99.18%
53.0	10.072	0.877	2297.218	0.04%	99.22%
54.0	10.132	0.890	2298.109	0.04%	99.26%
55.0	10.138	0.905	2299.014	0.04%	99.30%
56.0	10.152	0.917	2299.93	0.04%	99.34%
57.0	10.039	0.923	2300.854	0.04%	99.38%
58.0	9.992	0.926	2301.78	0.04%	99.42%
59.0	10.012	0.935	2302.715	0.04%	99.46%
60.0	9.885	0.940	2303.655	0.04%	99.50%
61.0	9.765	0.938	2304.593	0.04%	99.54%
62.0	9.439	0.925	2305.518	0.04%	99.58%
63.0	8.873	0.891	2306.409	0.04%	99.62%
64.0	8.280	0.842	2307.25	0.04%	99.66%
65.0	7.481	0.780	2308.03	0.03%	99.69%
66.0	6.741	0.710	2308.74	0.03%	99.72%
67.0	6.182	0.650	2309.39	0.03%	99.75%
68.0	5.622	0.598	2309.988	0.03%	99.77%
69.0	5.063	0.545	2310.533	0.02%	99.80%
70.0	4.623	0.497	2311.03	0.02%	99.82%
71.0	4.277	0.460	2311.49	0.02%	99.84%
72.0	3.870	0.424	2311.914	0.02%	99.86%
73.0	3.530	0.387	2312.301	0.02%	99.87%
74.0	3.164	0.352	2312.653	0.01%	99.89%
75.0	2.784	0.314	2312.967	0.01%	99.90%

Zonal flux distribution table

γ(°)	Average I(cd)	Zonal F(lm)	Sum F(lm)	Eff Flux(%)	Eff Sum(%)
76.0	2.418	0.276	2313.243	0.01%	99.91%
77.0	2.118	0.242	2313.485	0.01%	99.92%
78.0	1.839	0.212	2313.697	0.01%	99.93%
79.0	1.612	0.185	2313.882	0.01%	99.94%
80.0	1.479	0.167	2314.049	0.01%	99.95%
81.0	1.359	0.153	2314.202	0.01%	99.96%
82.0	1.279	0.143	2314.345	0.01%	99.96%
83.0	1.199	0.135	2314.48	0.01%	99.97%
84.0	1.146	0.128	2314.608	0.01%	99.97%
85.0	1.059	0.120	2314.728	0.01%	99.98%
86.0	0.986	0.112	2314.84	0.00%	99.98%
87.0	0.933	0.105	2314.945	0.00%	99.99%
88.0	0.893	0.100	2315.045	0.00%	99.99%
89.0	0.839	0.095	2315.14	0.00%	100.00%
90.0	0.793	0.089	2315.229	0.00%	100.00%

Zonal flux distribution table

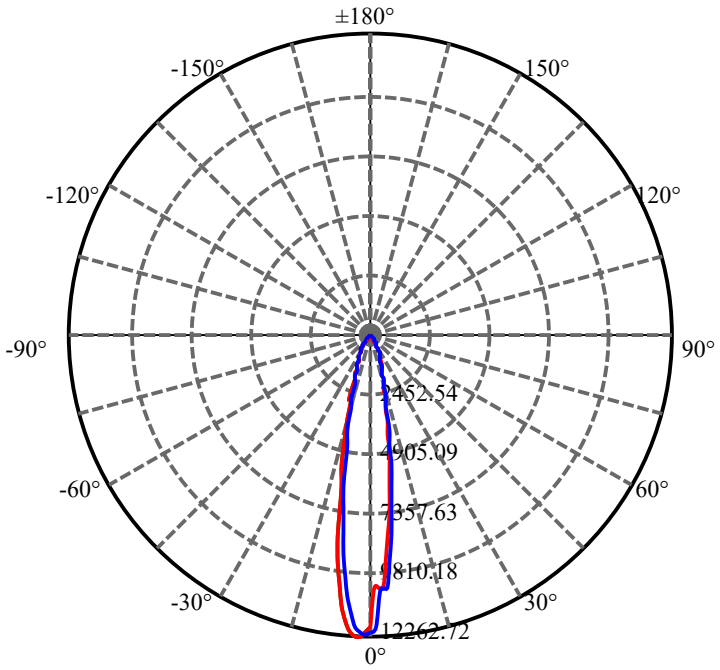
ZONAL LUMEN SUMMARY

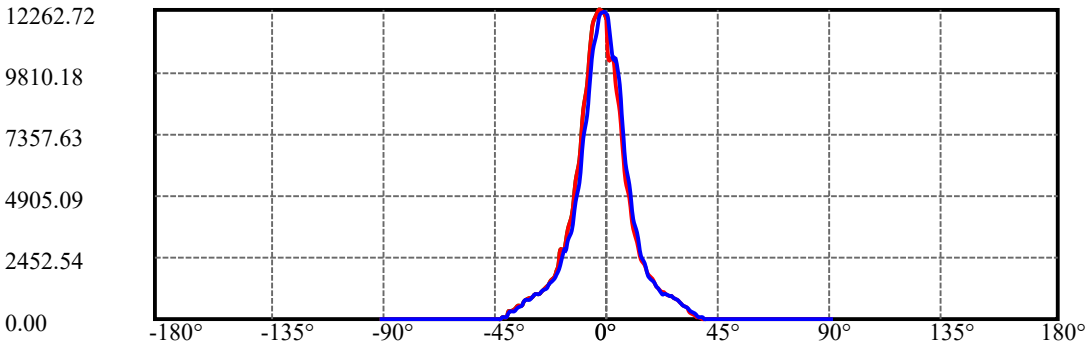
Zone	Lumens	%Lamp	%Fixt
0-30	2066.83	86.45%	89.27%
0-40	2282.20	95.45%	98.57%
0-60	2303.66	96.35%	99.50%
0-90	2315.14	96.83%	100.00%
0-120	2315.14	96.83%	100.00%
0-180	2315.23	96.84%	100.00%
60-90	11.48	0.48%	0.50%
90-120	0.00	0.00%	0.00%
90-130	0.00	0.00%	0.00%
90-150	0.00	0.00%	0.00%
90-180	0.00	0.00%	0.00%
0-25.17	1852.18	77.47%	80.00%

ZONAL LUMEN SUMMARY

0-10	791.43
10-20	793.39
20-30	482.01
30-40	215.37
40-50	12.39
50-60	9.07
60-70	7.38
70-80	3.02
80-90	1.09
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]





C180(Max):

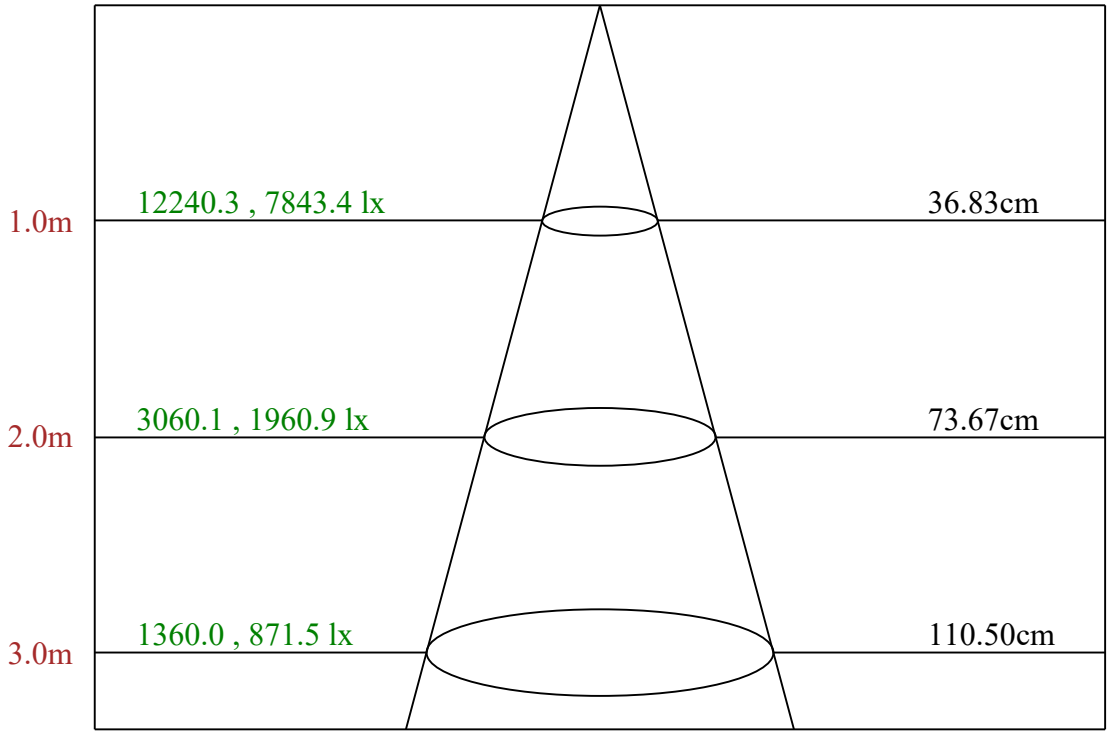
C0/C180:

C90/C270:

Field angle(10%Imax):C0/180Left:22.5 Right:22.9
:C90/270Left:23.4 Right:21.8

Beam Angle(50%Imax):C0/180Left:9.2 Right:9.2
:C90/270Left:9.2 Right:9.1

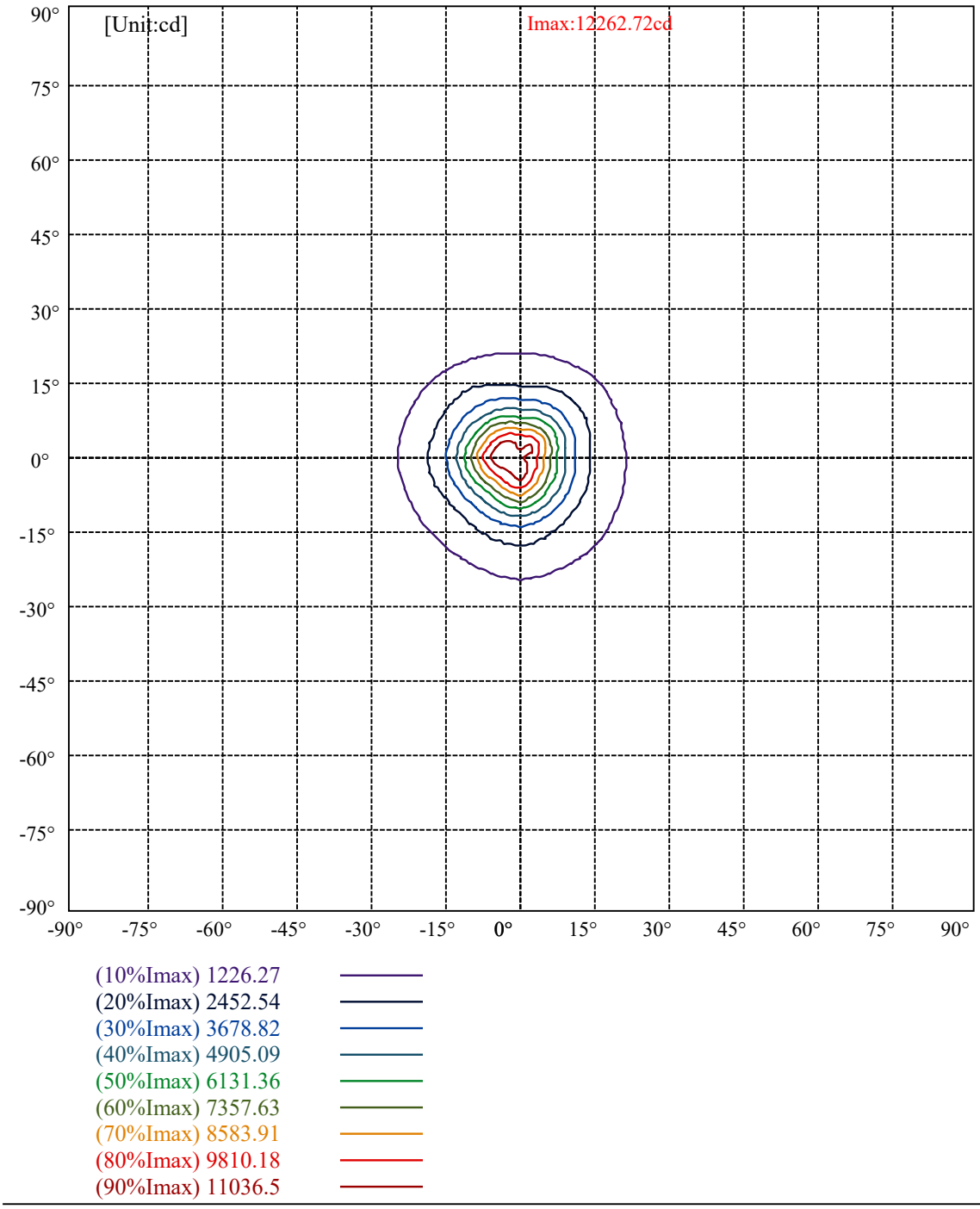
Lux distance Curve



Max , Ave

Beam angle of C180 plane 20.87

ISO-Intensity(V-H)



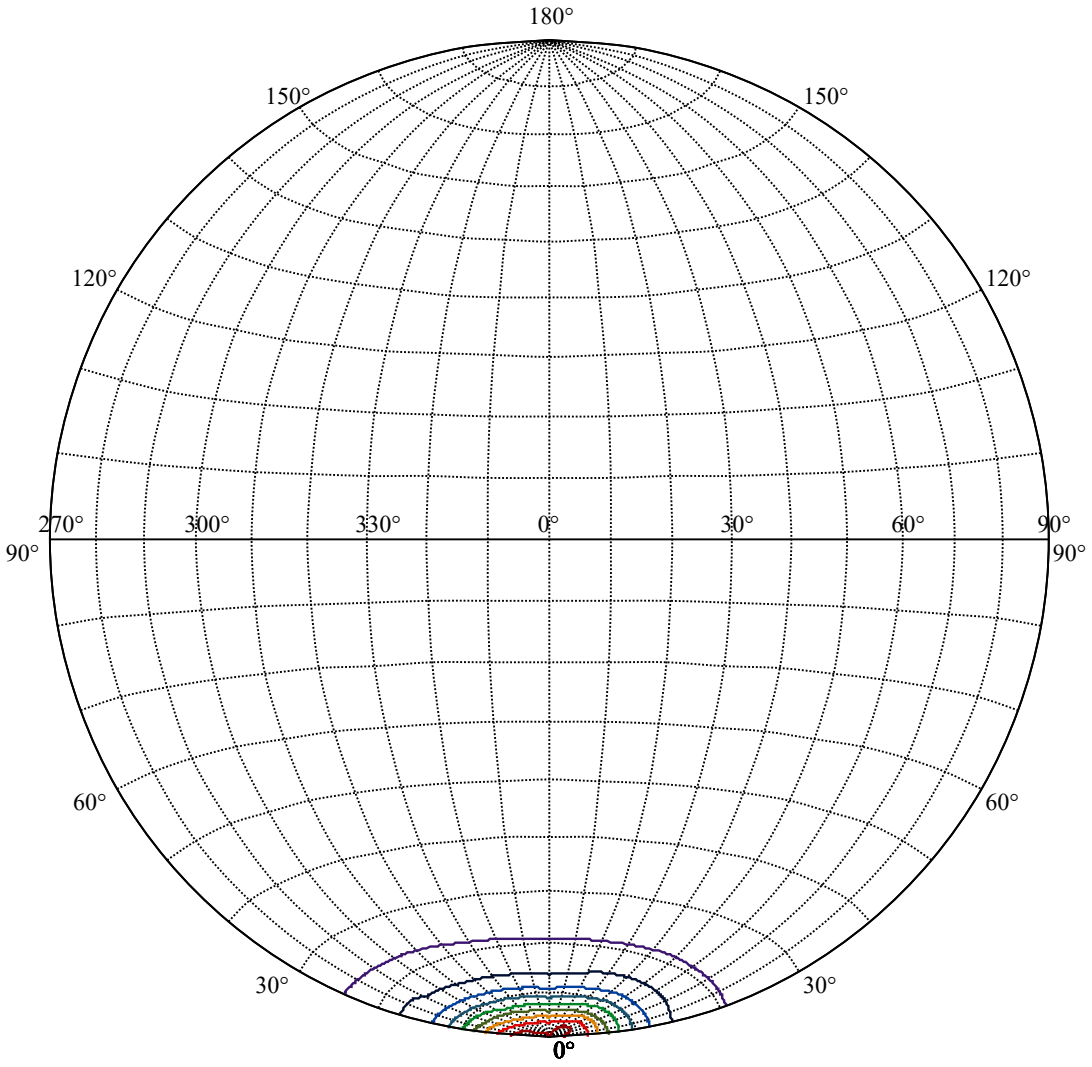
(10%Imax) 1226.27
(20%Imax) 2452.54
(30%Imax) 3678.82
(40%Imax) 4905.09
(50%Imax) 6131.36
(60%Imax) 7357.63
(70%Imax) 8583.91
(80%Imax) 9810.18
(90%Imax) 11036.5

Equipment: GMS 1800
Temperature(°C): 25.0

Date: 2025/3/4
Humidity(%): 60.0%

Operator: NT
Distance(m): 7.30

ISO candela diagram on circular web



House [Unit:cd] Road

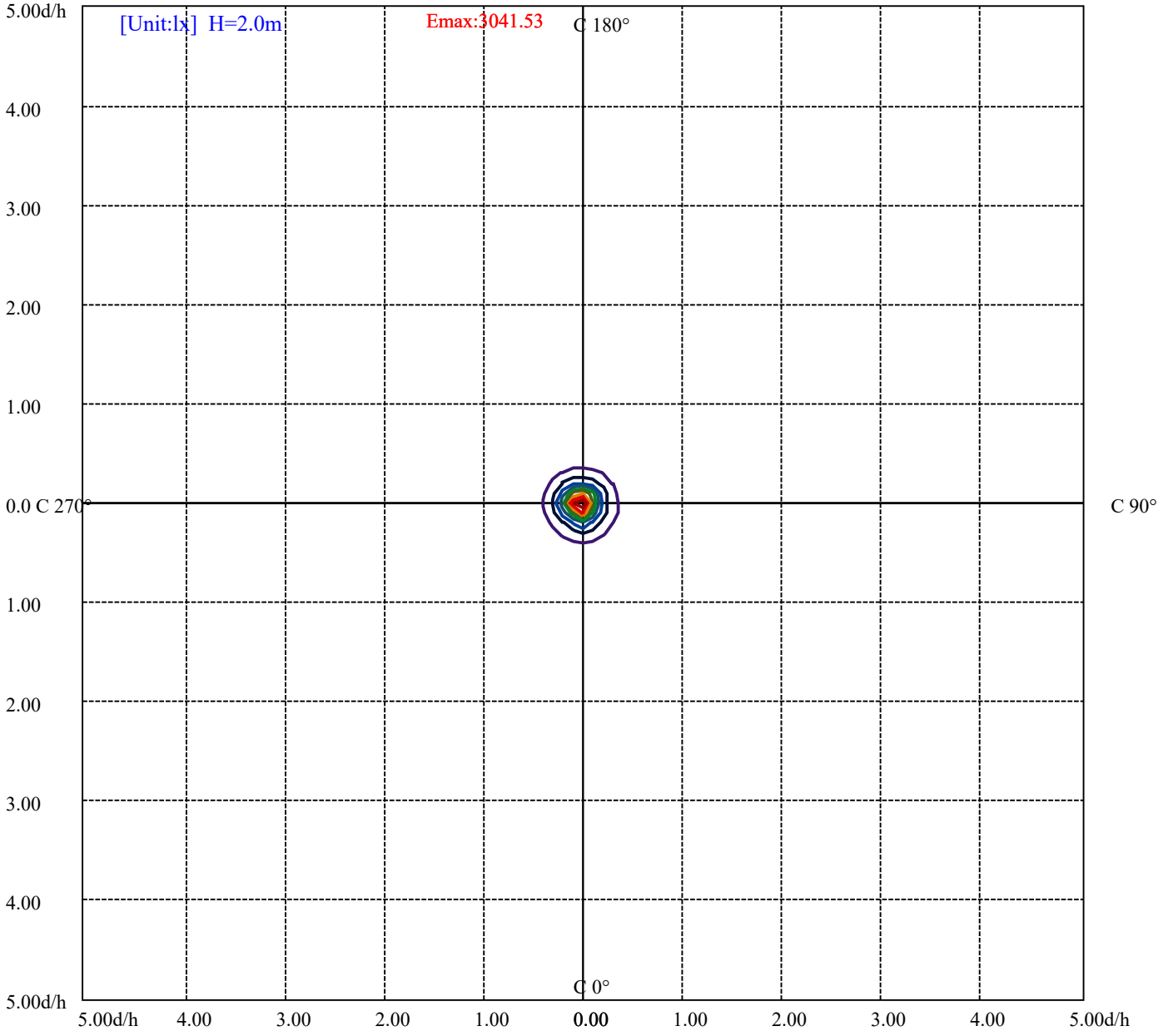
Imax:12262.72

(10%Imax) 1226.2
(20%Imax) 2452.41
(30%Imax) 3678.61
(40%Imax) 4904.81
(50%Imax) 6131.01
(60%Imax) 7357.22
(70%Imax) 8583.42
(80%Imax) 9809.62
(90%Imax) 11035.8

Equipment: GMS 1800	Date: 2025/3/4	Operator: NT
Temperature(°C): 25.0	Humidity(%): 60.0%	Distance(m): 7.30

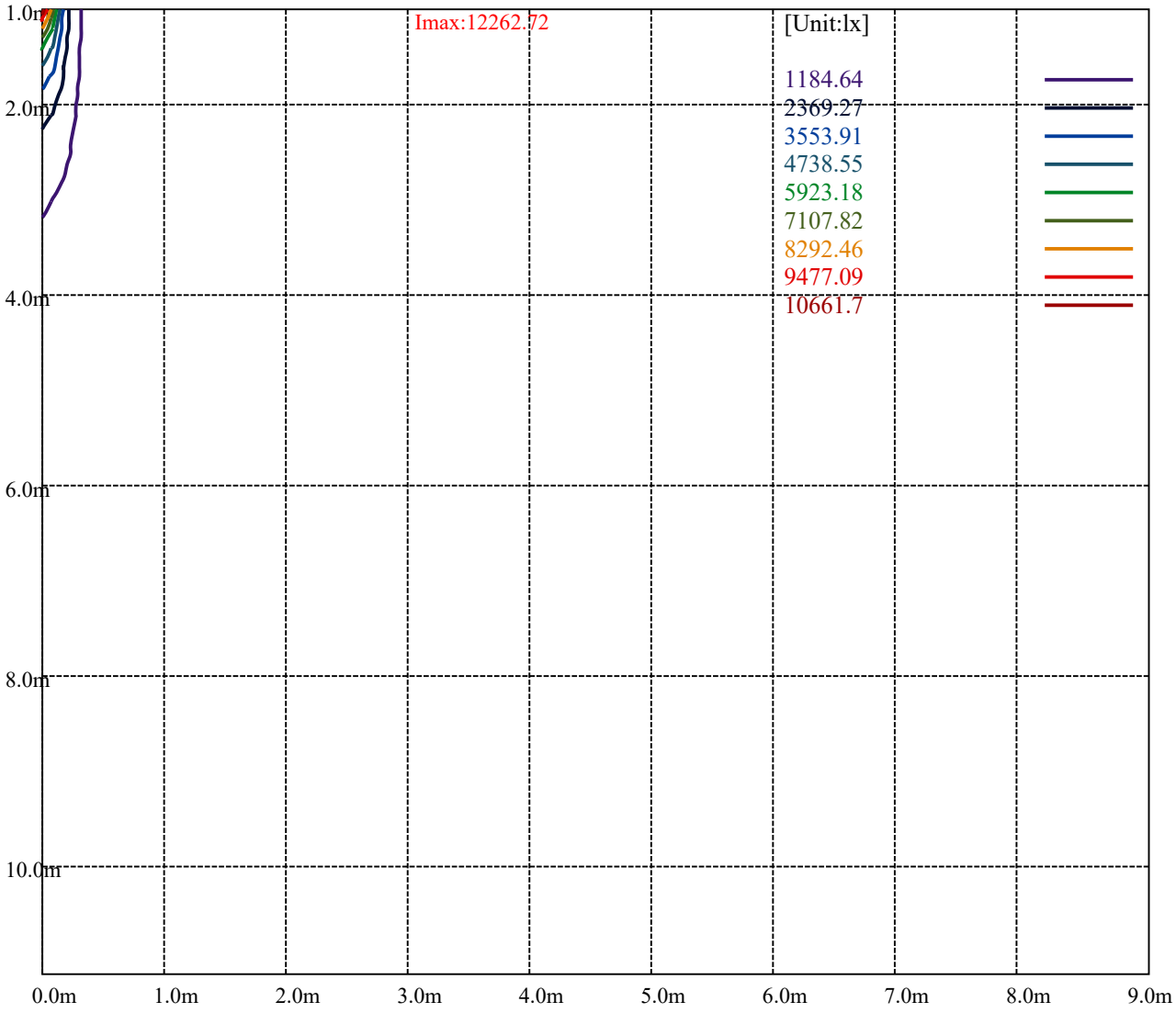
NT NT 2-2883-L

ISO illuminance diagram



Equipment: GMS 1800
Date: 2025/3/4
Operator: NT
Temperature(°C): 25.0
Humidity(%): 60.0%
Distance(m): 7.30

Space ISO Lux diagram



Equipment: GMS 1800
Temperature(°C): 25.0
Date: 2025/3/4
Humidity(%): 60.0%
Operator: NT
Distance(m): 7.30

NT NT 2-2883-L

Luminance Limitting Curve(no luminous side)

Luminance Table

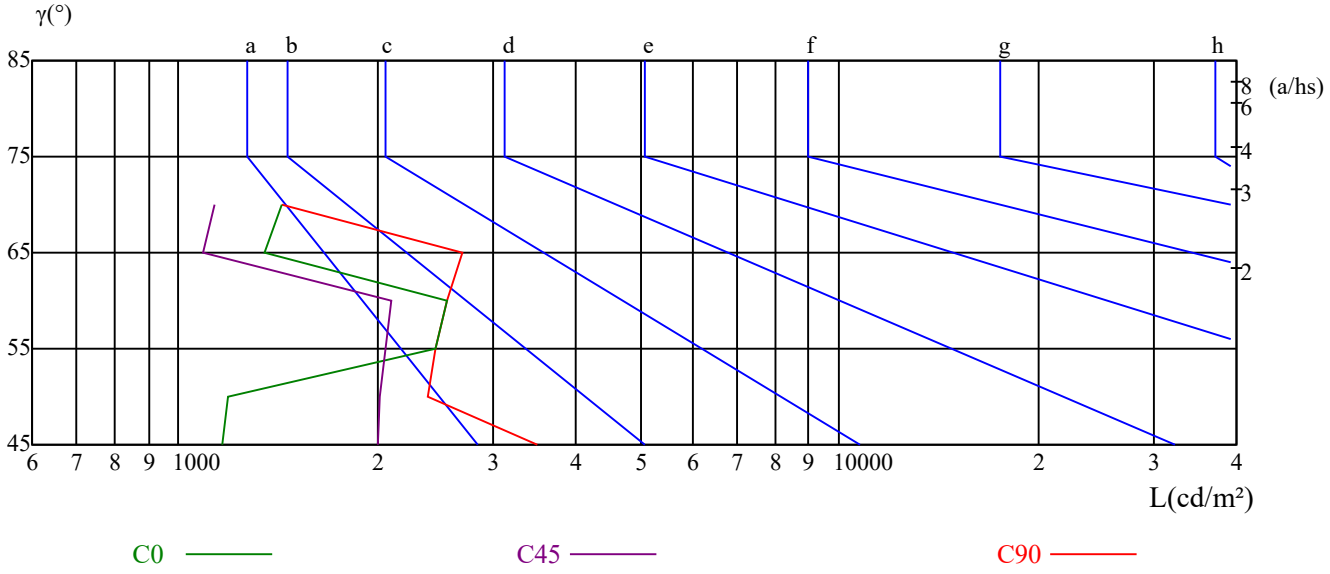
γ	45	50	55	60	65	70	75	80	85
C0	1161	1189	2455	2558	1345	1430	0	0	0
C45	2001	2018	2051	2102	1086	1132	0	0	0
C90	3484	2378	2455	2558	2691	1430	0	0	0

L(Hor)(65)	L(Ver)(65)	L45(65)	L(Hor)(75)	L(Ver)(75)	L45(75)	L(Hor)(85)	L(Ver)(85)	L45(85)
4765	6354	3177	2594	2594	2594	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



Equipment: GMS 1800
Temperature(°C): 25.0

Date: 2025/3/4
Humidity(%): 60.0%

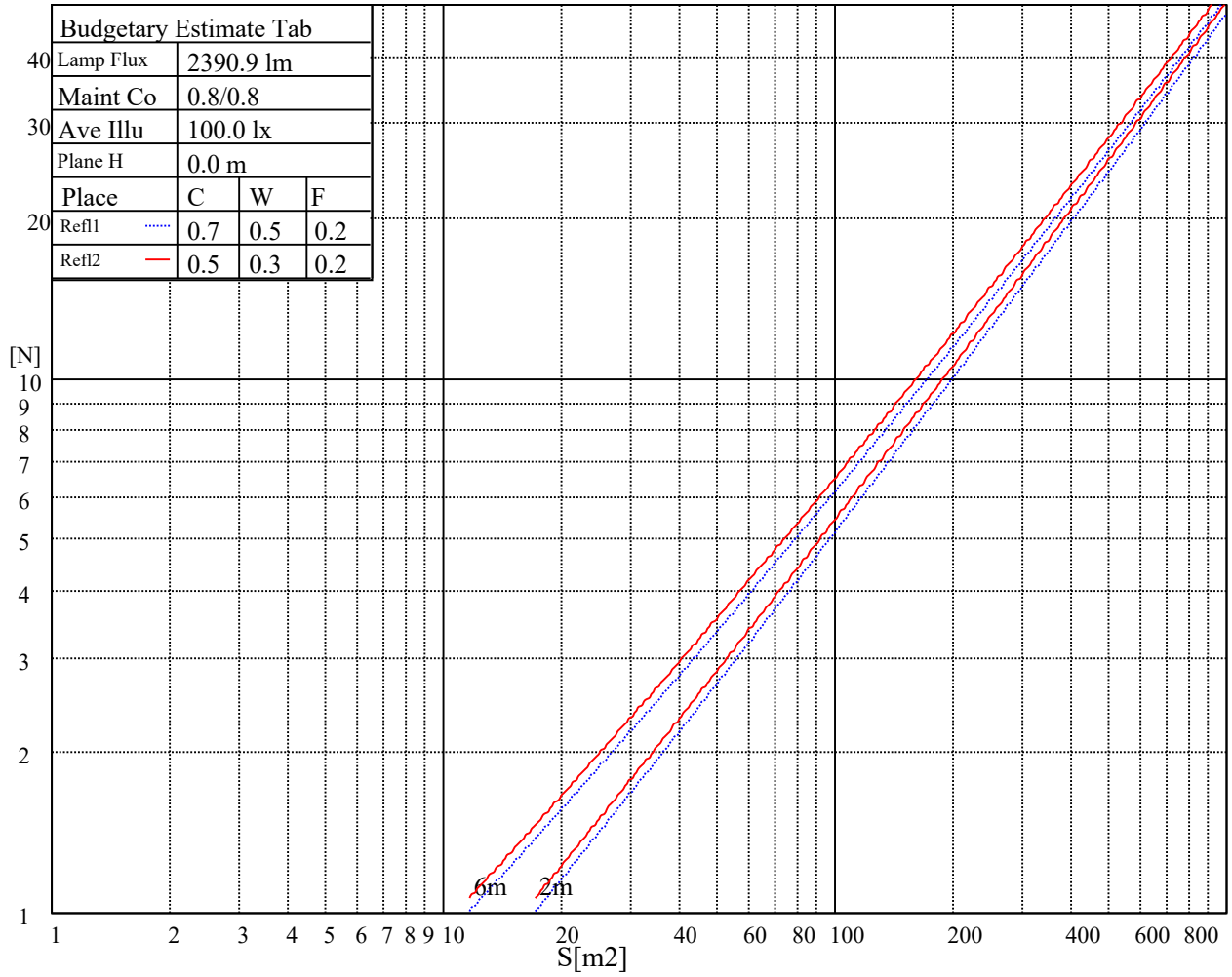
Operator: NT
Distance(m): 7.30

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	12.77	13.66	13.13	13.97	14.29	13.12	14.02	13.49	14.33	14.65
	3H	12.60	13.40	12.99	13.73	14.08	12.98	13.78	13.37	14.12	14.46
	4H	12.50	13.24	12.91	13.59	13.96	12.89	13.63	13.29	13.98	14.35
	6H	12.42	13.09	12.84	13.47	13.87	12.80	13.47	13.22	13.85	14.25
	8H	12.34	12.98	12.77	13.37	13.78	12.73	13.37	13.15	13.75	14.16
	12H	12.27	12.88	12.70	13.27	13.69	12.66	13.26	13.09	13.66	14.08
4H	2H	12.48	13.22	12.88	13.57	13.94	12.83	13.57	13.24	13.92	14.29
	3H	12.29	12.91	12.72	13.31	13.73	12.67	13.29	13.10	13.68	14.10
	4H	12.23	12.76	12.67	13.19	13.64	12.61	13.14	13.05	13.57	14.02
	6H	12.10	12.56	12.57	13.02	13.47	12.48	12.95	12.95	13.40	13.85
	8H	12.04	12.47	12.53	12.93	13.41	12.42	12.85	12.91	13.31	13.79
	12H	12.00	12.39	12.49	12.85	13.37	12.37	12.77	12.87	13.22	13.75
8H	4H	12.04	12.47	12.52	12.93	13.40	12.42	12.85	12.90	13.31	13.78
	6H	11.90	12.25	12.40	12.73	13.24	12.27	12.62	12.78	13.11	13.62
	8H	11.89	12.18	12.43	12.70	13.20	12.27	12.56	12.80	13.08	13.58
	12H	11.85	12.06	12.39	12.58	13.11	12.22	12.44	12.77	12.96	13.48
12H	4H	11.98	12.38	12.47	12.83	13.35	12.36	12.76	12.85	13.21	13.73
	6H	11.88	12.17	12.42	12.69	13.19	12.26	12.55	12.80	13.07	13.57
	8H	11.84	12.06	12.39	12.57	13.10	12.22	12.43	12.76	12.95	13.47

Variation with the observer position at spacings:		
S = 1.0H	5.8/-8.0	5.9/-8.8
S = 1.5H	8.5/-8.3	8.6/-8.8
S = 2.0H	10.5/-9.3	10.6/-9.7
Standard tables:	BK0	BK0
Uncorrected UGR	-6.0	-6.4

UGR calculation is based on CIE Publ. 117 ,S/H = 0.25

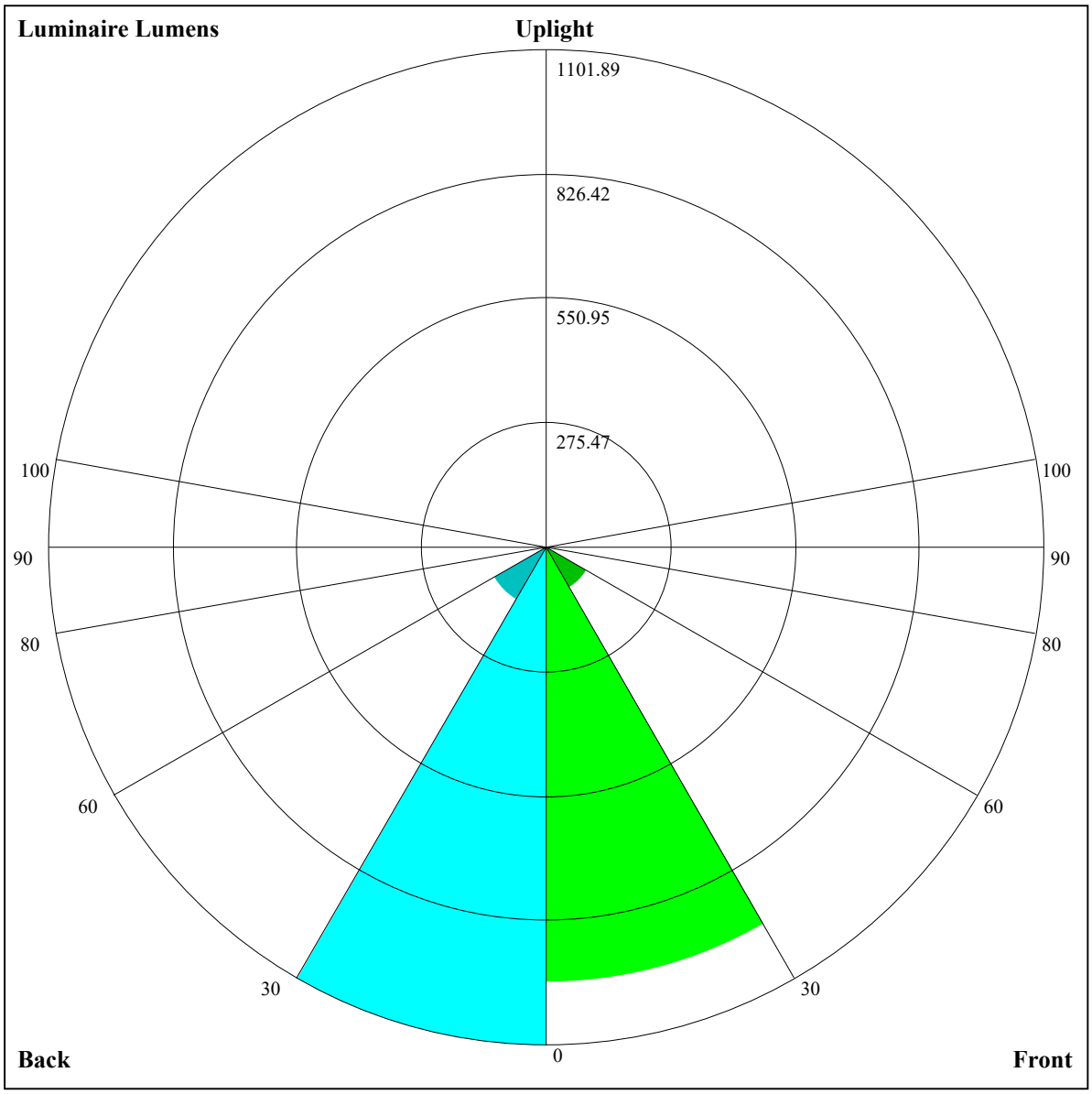
Budgetary Estimate Table



Equipment: GMS 1800 Date: 2025/3/4 Operator: NT
Temperature(°C): 25.0 Humidity(%): 60.0% Distance(m): 7.30

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	1.15	1.15	1.15	1.12	1.12	1.12	1.07	1.07	1.07	1.03	1.03	1.03	0.99	0.99	0.99	0.97
1	1.09	1.07	1.05	1.07	1.05	1.04	1.03	1.02	1.00	0.99	0.98	0.97	0.96	0.95	0.95	0.93
2	1.03	1.00	0.98	1.02	0.99	0.97	0.99	0.96	0.95	0.96	0.94	0.93	0.93	0.92	0.91	0.89
3	0.98	0.95	0.92	0.97	0.94	0.91	0.95	0.92	0.90	0.93	0.90	0.88	0.90	0.89	0.87	0.86
4	0.94	0.90	0.87	0.93	0.89	0.86	0.91	0.88	0.85	0.89	0.87	0.85	0.88	0.85	0.84	0.82
5	0.90	0.86	0.83	0.89	0.86	0.83	0.88	0.84	0.82	0.86	0.83	0.81	0.85	0.83	0.80	0.79
6	0.87	0.82	0.79	0.86	0.82	0.79	0.85	0.81	0.79	0.84	0.80	0.78	0.82	0.80	0.78	0.77
7	0.84	0.79	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
8	0.81	0.76	0.74	0.80	0.76	0.73	0.79	0.76	0.73	0.78	0.75	0.73	0.78	0.75	0.73	0.72
9	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
10	0.76	0.71	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



Luminaire Lumens:
FL=963.81,FM=104.43,FH=4.91,FVH=0.56
BL=1101.89,BM=135.63,BH=5.73,BVH=0.6
UL=0,UH=0

BUG Rating:B3-U0-G0

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	11847.06	10324.03	10324.03	10145.51	9209.74	8233.46	7265.72	6336.87	5501.82
45.0	12166.80	12006.93	11825.74	11372.78	10312.31	9758.09	8750.91	7317.41	6720.56
90.0	12108.18	11900.35	10479.11	10290.99	10290.99	9258.76	8178.58	7123.43	6134.37
135.0	12150.81	12220.09	12166.80	11953.64	11516.66	10807.90	9854.01	8804.20	7738.40
180.0	11847.06	12145.48	12262.72	12241.41	12076.21	11713.83	11095.67	10248.36	9283.81
225.0	12166.80	12204.10	12076.21	11756.47	10281.40	10281.40	9370.67	8405.59	7433.05
270.0	12108.18	12172.13	12102.85	11852.39	11378.11	10696.00	9875.33	8985.39	8058.14
315.0	12150.81	11921.67	10520.14	10520.14	9836.96	8909.71	7962.22	7399.48	6137.04
360.0	11847.06	10324.03	10324.03	10145.51	9209.74	8233.46	7265.72	6336.87	5501.82

C/γ(°)	9.0	10.0	11.0	12.0	13.0	14.0	15.0	16.0	17.0
0.0	4768.02	4120.01	3556.73	3074.46	2673.72	2351.85	2098.72	1892.49	1723.03
45.0	5809.30	5031.27	4343.83	3746.98	3224.74	2777.10	2777.10	2127.50	1943.65
90.0	5307.84	4611.34	3991.58	3436.30	2946.56	2528.24	2180.25	1905.81	1708.10
135.0	7104.25	5782.66	5025.94	4620.94	4013.43	3453.88	2958.29	2782.43	2702.50
180.0	8287.29	7274.78	6320.89	5457.59	4732.84	4109.35	3549.81	3155.46	2734.47
225.0	6503.14	5637.71	5158.63	4197.81	3847.70	3324.39	2731.27	2517.58	2222.89
270.0	7146.88	6240.95	5409.63	4668.90	4034.75	3496.52	3112.83	2713.15	2713.15
315.0	5628.65	4876.19	4222.33	3644.66	3149.60	2746.73	2426.99	2169.06	1955.90
360.0	4768.02	4120.01	3556.73	3074.46	2673.72	2351.85	2098.72	1892.49	1723.03

C/γ(°)	18.0	19.0	20.0	21.0	22.0	23.0	24.0	25.0	26.0
0.0	1569.55	1433.13	1306.83	1217.84	1033.13	1033.13	995.88	940.73	894.42
45.0	1710.24	1540.24	1423.00	1268.99	1180.00	1083.55	1000.95	932.73	877.31
90.0	1549.83	1444.85	1298.84	1195.45	1023.75	1023.75	986.13	930.55	882.00
135.0	1954.84	1744.34	1576.48	1431.00	1310.03	1205.05	1134.17	1042.51	988.16
180.0	2734.47	2126.96	1893.55	1693.18	1530.12	1389.96	1277.52	1175.74	1092.07
225.0	1978.28	1770.99	1592.47	1438.46	1306.83	1198.65	1034.04	1034.04	964.18
270.0	2142.95	1927.13	1748.07	1595.66	1464.57	1352.13	1253.01	1162.41	1085.14
315.0	1776.85	1621.24	1488.55	1372.38	1274.86	1183.73	1041.61	1041.61	991.46
360.0	1569.55	1433.13	1306.83	1217.84	1033.13	1033.13	995.88	940.73	894.42

C/γ(°)	27.0	28.0	29.0	30.0	31.0	32.0	33.0	34.0	35.0
0.0	834.73	762.21	682.01	596.79	509.35	420.99	337.27	255.53	178.47
45.0	829.35	771.27	703.05	629.51	551.71	474.44	395.57	316.70	301.25
90.0	834.41	767.75	691.76	608.68	525.23	442.68	361.04	281.48	206.82
135.0	930.60	873.05	834.68	771.80	694.53	615.13	531.99	448.86	365.73
180.0	1021.20	961.51	910.35	864.52	805.37	731.83	685.47	569.30	517.61
225.0	907.42	863.62	808.62	745.31	690.05	619.34	541.21	461.44	381.82
270.0	1020.66	965.77	916.21	863.99	794.18	748.35	666.82	544.25	490.43
315.0	935.93	881.20	811.13	730.18	644.86	555.71	465.33	377.40	293.25
360.0	834.73	762.21	682.01	596.79	509.35	420.99	337.27	255.53	178.47

C/γ(°)	36.0	37.0	38.0	39.0	40.0	41.0	42.0	43.0	44.0
0.0	111.96	57.98	33.79	15.61	12.63	11.30	9.54	8.63	7.94
45.0	301.25	137.06	68.10	44.39	22.91	19.45	17.27	15.45	13.86
90.0	140.69	83.77	41.09	25.31	18.39	17.32	16.57	15.99	15.40
135.0	285.79	285.79	142.66	85.96	42.53	27.07	18.12	17.59	16.95
180.0	432.87	349.21	284.73	284.73	114.15	62.46	27.98	16.84	15.51
225.0	302.79	228.45	162.53	105.30	60.75	31.39	23.34	21.26	19.02
270.0	402.50	317.77	284.73	196.80	86.33	41.09	18.81	16.52	15.51
315.0	214.55	143.72	82.81	36.29	16.31	13.86	12.20	10.92	9.33
360.0	111.96	57.98	33.79	15.61	12.63	11.30	9.54	8.63	7.94

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	7.25	7.19	7.41	7.78	7.89	7.73	7.35	7.03	7.19
45.0	12.31	10.76	9.97	9.49	9.43	9.59	9.86	10.28	10.98
90.0	14.97	14.44	13.59	13.00	12.68	12.47	12.26	12.10	11.88
135.0	16.31	15.51	14.55	13.59	12.42	11.72	11.30	10.98	10.71
180.0	14.55	13.64	13.06	12.90	12.74	12.47	11.83	10.87	10.50
225.0	16.79	14.71	13.06	11.94	11.40	11.35	11.83	12.15	12.74
270.0	14.28	13.27	13.16	12.90	12.90	12.84	12.10	11.67	11.08
315.0	9.06	8.37	7.78	7.51	6.87	6.29	5.86	5.60	5.49
360.0	7.25	7.19	7.41	7.78	7.89	7.73	7.35	7.03	7.19

C/γ(°)	54.0	55.0	56.0	57.0	58.0	59.0	60.0	61.0	62.0
0.0	7.73	8.31	9.06	9.49	9.86	9.81	9.43	8.79	7.94
45.0	11.99	12.47	12.74	12.26	11.51	10.60	9.49	8.95	8.26
90.0	11.67	11.51	11.40	11.56	11.94	12.74	13.11	13.06	12.31
135.0	10.50	10.23	10.02	9.75	9.49	9.22	8.90	8.58	8.31
180.0	10.02	9.86	9.81	9.75	9.81	10.18	10.60	11.40	11.88
225.0	13.00	12.79	12.42	11.62	11.14	10.71	10.28	9.75	9.11
270.0	10.60	10.28	10.02	9.97	10.07	10.60	10.98	11.24	11.35
315.0	5.54	5.65	5.76	5.92	6.13	6.23	6.29	6.34	6.34
360.0	7.73	8.31	9.06	9.49	9.86	9.81	9.43	8.79	7.94

C/γ(°)	63.0	64.0	65.0	66.0	67.0	68.0	69.0	70.0	71.0
0.0	6.98	5.97	5.49	5.01	4.74	4.37	4.05	3.62	3.30
45.0	7.46	6.71	5.92	5.38	4.90	4.53	4.32	4.00	3.84
90.0	11.19	9.81	8.31	6.98	6.13	5.44	4.90	4.42	3.84
135.0	7.94	7.67	7.46	7.09	6.71	6.50	5.86	5.38	4.85
180.0	11.62	11.46	10.23	9.06	7.94	6.71	5.86	5.28	5.06
225.0	8.58	7.67	6.82	6.18	5.65	5.17	4.80	4.53	4.37
270.0	10.98	10.60	9.59	8.26	7.30	6.77	5.65	5.17	4.96
315.0	6.23	6.34	6.02	5.97	6.08	5.49	5.06	4.58	4.00
360.0	6.98	5.97	5.49	5.01	4.74	4.37	4.05	3.62	3.30

C/γ(°)	72.0	73.0	74.0	75.0	76.0	77.0	78.0	79.0	80.0
0.0	2.93	2.50	2.08	1.71	1.44	1.33	1.28	1.17	1.23
45.0	3.52	3.25	2.93	2.56	2.29	2.08	1.87	1.76	1.71
90.0	3.41	3.04	2.61	2.18	1.76	1.55	1.44	1.23	1.12
135.0	4.37	3.94	3.52	3.14	2.72	2.40	2.03	1.76	1.60
180.0	4.74	4.21	4.05	3.68	3.30	2.93	2.45	2.03	1.71
225.0	4.00	3.84	3.46	3.14	2.82	2.50	2.13	1.81	1.65
270.0	4.37	4.10	3.73	3.30	2.82	2.34	1.92	1.60	1.33
315.0	3.62	3.36	2.93	2.56	2.18	1.81	1.60	1.55	1.49
360.0	2.93	2.50	2.08	1.71	1.44	1.33	1.28	1.17	1.23

C/γ(°)	81.0	82.0	83.0	84.0	85.0	86.0	87.0	88.0	89.0
0.0	1.12	1.07	1.07	1.01	0.96	0.91	0.85	0.91	0.96
45.0	1.55	1.44	1.28	1.17	1.07	0.96	0.91	0.85	0.69
90.0	1.12	1.07	0.96	0.96	0.91	0.85	0.85	0.85	0.75
135.0	1.49	1.44	1.39	1.33	1.23	1.17	1.07	1.01	0.96
180.0	1.44	1.33	1.28	1.17	1.12	1.01	0.96	0.91	0.85
225.0	1.60	1.44	1.33	1.23	1.12	1.01	0.96	0.85	0.80
270.0	1.23	1.12	1.07	1.07	1.01	0.96	0.91	0.85	0.80
315.0	1.33	1.33	1.23	1.23	1.07	1.01	0.96	0.91	0.91
360.0	1.12	1.07	1.07	1.01	0.96	0.91	0.85	0.91	0.96

Intensity data(cd)

C/γ(°)	90.0
0.0	0.91
45.0	0.75
90.0	0.75
135.0	0.91
180.0	0.75
225.0	0.75
270.0	0.75
315.0	0.80
360.0	0.91