NATA LIGHTING CO.,LTD.
www.nata.cn
Email:info@nata.com
Tel:+86-750-3770000 Fax:+86 750 3771111
Address:Address:380JinOu Road,GaoXin Zone,Jiang Men City,Guangdong,China

Nata

Client:
LumCAT: 2-2751-L
Luminaire: 92.70.411.00
Report No: 2024831-B005
Ballast type: AC

Test No: 2024831-C005	Voltage(V): 36.400
LampCAT: LUMILEDS LUXEON CoB 1205	Current(A): 0.603
Lamp flux(lm): 2551.0	Power (W): 21.940
Number of Lamps: 1	PF: 0.000
Length(mm): 0	Width(mm): 0
Phm Type: C	Height(mm): 0

Photometric Results

Lumens(lm): 2418.50, Efficiency(%): 94.81% , Luminous Efficacy(lm/W): 110.23
Central intensity(cd): 12898.890, Maximum intensity(cd): 12898.890
Angle of maximum intensity: C=0.0 γ=0.0
Beam Angle(50%Imax): [C0/180]Total=18.2
[C90/270]Total=18.2
Field angle(10%Imax): [C0/180]Total=45.0
[C90/270]Total=45.0
Maximum s/h(1/2): C0_180=0.31 C90_270=0.31
Maximum s/h(1/4): C0_180=0.33 C90_270=0.33
Up flux rate of lamp(%): 0.00%
Down flux rate of lamp(%): 94.81%
Up flux rate of LUM(%): - -
Down flux rate of LUM(%): 100.00%
CIE Type : Direct lighting
Output flux ratio in π solid angle : 99.063%

Nata 2-2751-L

Zonal flux distribution table

γ(°)	Average I(cd)	Zonal F(lm)	Sum F(lm)	Eff Flux(%)	Eff Sum(%)
0.0	12898.890	0.000	0	0.00%	0.00%
1.0	12654.612	12.227	12.227	0.48%	0.51%
2.0	12273.613	35.779	48.006	1.40%	1.98%
3.0	11800.892	57.578	105.585	2.26%	4.37%
4.0	11081.496	76.595	182.179	3.00%	7.53%
5.0	10332.874	92.123	274.303	3.61%	11.34%
6.0	9440.304	103.913	378.216	4.07%	15.64%
7.0	8440.191	110.984	489.2	4.35%	20.23%
8.0	7498.593	114.071	603.271	4.47%	24.94%
9.0	6507.822	113.514	716.785	4.45%	29.64%
10.0	5639.680	109.930	826.716	4.31%	34.18%
11.0	4837.931	104.693	931.408	4.10%	38.51%
12.0	4153.246	98.286	1029.695	3.85%	42.58%
13.0	3601.589	92.030	1121.725	3.61%	46.38%
14.0	3163.382	86.591	1208.316	3.39%	49.96%
15.0	2811.043	82.020	1290.336	3.22%	53.35%
16.0	2465.214	77.312	1367.648	3.03%	56.55%
17.0	2204.360	72.718	1440.366	2.85%	59.56%
18.0	1969.412	68.816	1509.182	2.70%	62.40%
19.0	1751.803	64.742	1573.923	2.54%	65.08%
20.0	1587.447	61.118	1635.041	2.40%	67.61%
21.0	1466.605	58.644	1693.685	2.30%	70.03%
22.0	1337.992	56.360	1750.045	2.21%	72.36%
23.0	1240.869	54.111	1804.156	2.12%	74.60%
24.0	1146.309	52.192	1856.348	2.05%	76.76%
25.0	1088.471	50.814	1907.162	1.99%	78.86%
26.0	1002.538	49.358	1956.521	1.93%	80.90%
27.0	920.218	47.041	2003.561	1.84%	82.84%
28.0	838.687	44.532	2048.093	1.75%	84.68%
29.0	751.953	41.616	2089.709	1.63%	86.41%
30.0	662.570	38.192	2127.901	1.50%	87.98%
31.0	574.061	34.414	2162.314	1.35%	89.41%
32.0	494.232	30.605	2192.92	1.20%	90.67%
33.0	416.216	26.822	2219.742	1.05%	91.78%
34.0	351.926	23.246	2242.988	0.91%	92.74%
35.0	299.679	20.236	2263.225	0.79%	93.58%
36.0	258.443	17.771	2280.995	0.70%	94.31%
37.0	217.149	15.511	2296.506	0.61%	94.96%

Zonal flux distribution table

γ(°)	Average I(cd)	Zonal F(lm)	Sum F(lm)	Eff Flux(%)	Eff Sum(%)
38.0	184.028	13.391	2309.897	0.52%	95.51%
39.0	144.810	11.224	2321.121	0.44%	95.97%
40.0	121.104	9.274	2330.395	0.36%	96.36%
41.0	99.179	7.844	2338.24	0.31%	96.68%
42.0	81.971	6.581	2344.821	0.26%	96.95%
43.0	68.706	5.582	2350.403	0.22%	97.18%
44.0	57.595	4.767	2355.169	0.19%	97.38%
45.0	49.047	4.098	2359.268	0.16%	97.55%
46.0	42.589	3.584	2362.852	0.14%	97.70%
47.0	37.799	3.197	2366.049	0.13%	97.83%
48.0	34.258	2.913	2368.962	0.11%	97.95%
49.0	31.314	2.693	2371.654	0.11%	98.06%
50.0	29.290	2.527	2374.181	0.10%	98.17%
51.0	27.484	2.402	2376.583	0.09%	98.27%
52.0	26.078	2.298	2378.882	0.09%	98.36%
53.0	24.921	2.218	2381.1	0.09%	98.45%
54.0	24.198	2.165	2383.265	0.08%	98.54%
55.0	23.581	2.133	2385.398	0.08%	98.63%
56.0	23.101	2.109	2387.507	0.08%	98.72%
57.0	22.852	2.101	2389.608	0.08%	98.81%
58.0	22.490	2.097	2391.705	0.08%	98.89%
59.0	21.991	2.080	2393.785	0.08%	98.98%
60.0	21.380	2.049	2395.834	0.08%	99.06%
61.0	20.506	1.999	2397.832	0.08%	99.15%
62.0	18.995	1.903	2399.736	0.07%	99.22%
63.0	17.470	1.773	2401.509	0.07%	99.30%
64.0	15.854	1.635	2403.145	0.06%	99.37%
65.0	13.962	1.476	2404.62	0.06%	99.43%
66.0	12.477	1.319	2405.939	0.05%	99.48%
67.0	11.078	1.184	2407.124	0.05%	99.53%
68.0	9.954	1.065	2408.189	0.04%	99.57%
69.0	8.962	0.965	2409.154	0.04%	99.61%
70.0	8.272	0.885	2410.039	0.03%	99.65%
71.0	7.608	0.821	2410.86	0.03%	99.68%
72.0	7.043	0.762	2411.622	0.03%	99.72%
73.0	6.610	0.714	2412.336	0.03%	99.75%
74.0	6.170	0.672	2413.008	0.03%	99.77%
75.0	5.729	0.629	2413.636	0.02%	99.80%

Zonal flux distribution table

γ(°)	Average I(cd)	Zonal F(lm)	Sum F(lm)	Eff Flux(%)	Eff Sum(%)
76.0	5.342	0.588	2414.224	0.02%	99.82%
77.0	4.941	0.548	2414.772	0.02%	99.85%
78.0	4.566	0.509	2415.281	0.02%	99.87%
79.0	4.205	0.471	2415.752	0.02%	99.89%
80.0	3.791	0.431	2416.184	0.02%	99.90%
81.0	3.423	0.390	2416.574	0.02%	99.92%
82.0	3.035	0.350	2416.924	0.01%	99.93%
83.0	2.668	0.310	2417.234	0.01%	99.95%
84.0	2.319	0.272	2417.506	0.01%	99.96%
85.0	1.984	0.235	2417.74	0.01%	99.97%
86.0	1.715	0.202	2417.943	0.01%	99.98%
87.0	1.465	0.174	2418.117	0.01%	99.98%
88.0	1.235	0.148	2418.265	0.01%	99.99%
89.0	1.071	0.126	2418.391	0.00%	100.00%
90.0	0.946	0.111	2418.502	0.00%	100.00%

Zonal flux distribution table

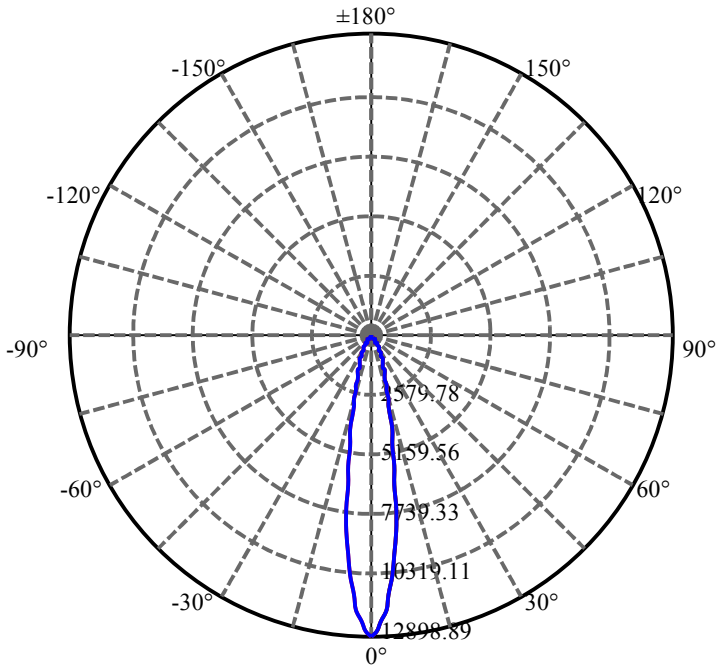
ZONAL LUMEN SUMMARY

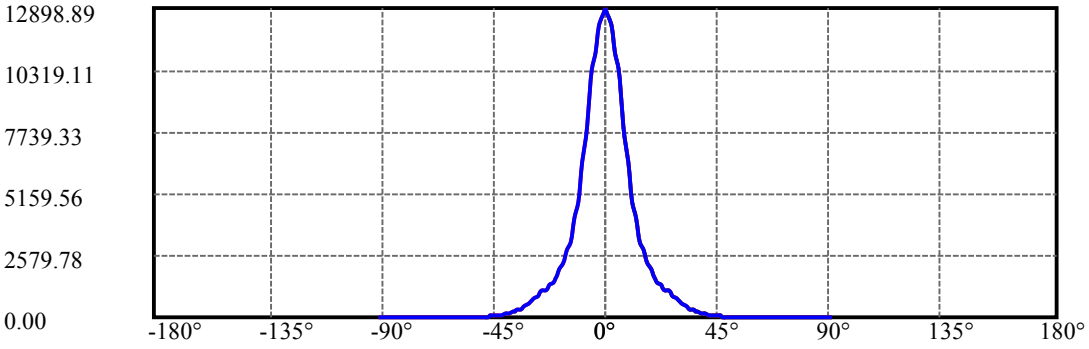
Zone	Lumens	%Lamp	%Fixt
0-30	2127.90	83.41%	87.98%
0-40	2330.40	91.35%	96.36%
0-60	2395.83	93.92%	99.06%
0-90	2418.39	94.80%	100.00%
0-120	2418.39	94.80%	100.00%
0-180	2418.50	94.81%	100.00%
60-90	22.56	0.88%	0.93%
90-120	0.00	0.00%	0.00%
90-130	0.00	0.00%	0.00%
90-150	0.00	0.00%	0.00%
90-180	0.00	0.00%	0.00%
0-25.56	1934.80	75.84%	80.00%

ZONAL LUMEN SUMMARY

0-10	826.72
10-20	808.33
20-30	492.86
30-40	202.49
40-50	43.79
50-60	21.65
60-70	14.21
70-80	6.14
80-90	2.21
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:22.5 Right:22.5
:C90/270Left:22.5 Right:22.5

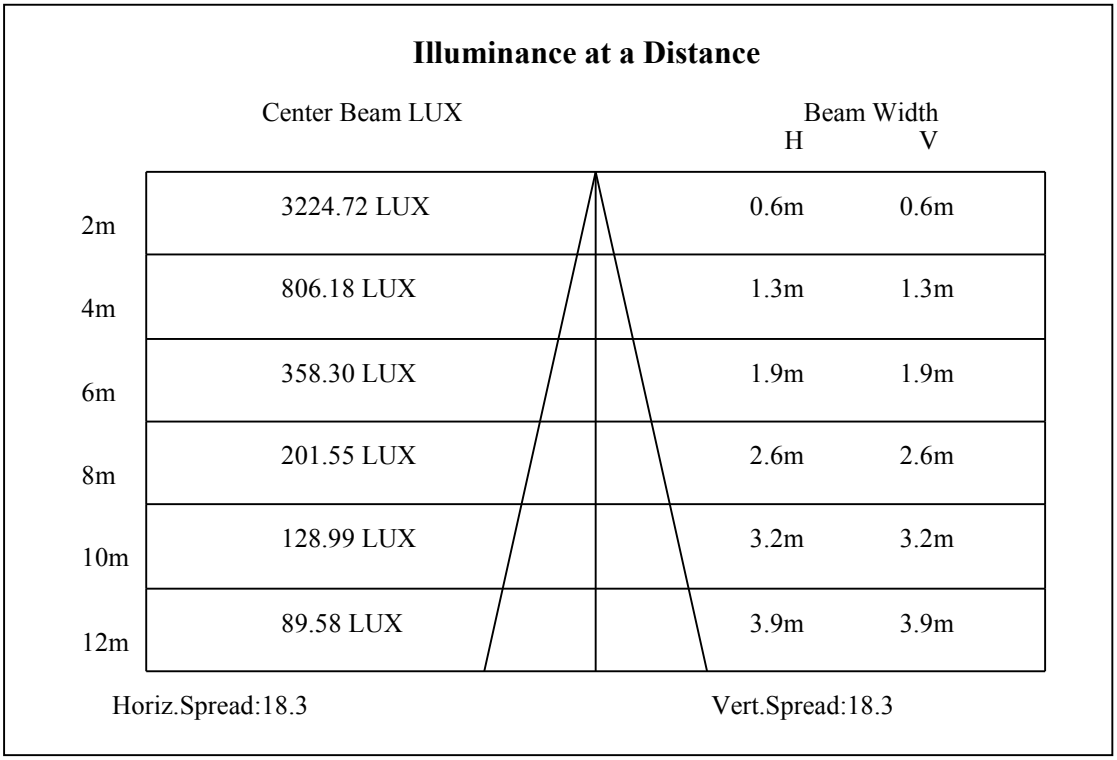
Beam Angle(50%Imax):C0/180Left:9.1 Right:9.1
:C90/270Left:9.1 Right:9.1

Equipment: GMS 1800
Temperature(°C): 25.0

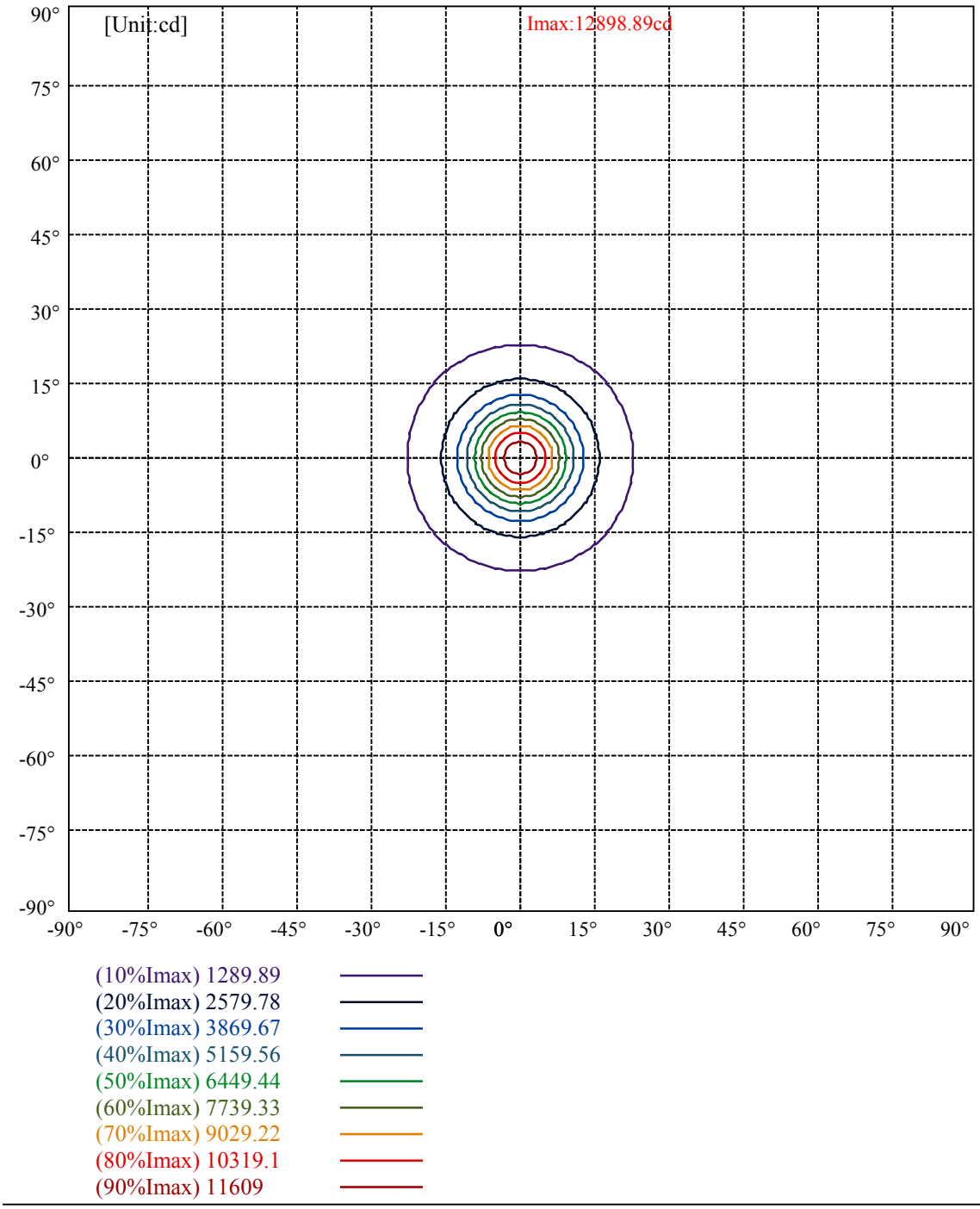
Date: 2024/8/31
Humidity(%): 60.0%

Operator: NT
Distance(m): 7.25

Lux distance Curve



ISO-Intensity(V-H)

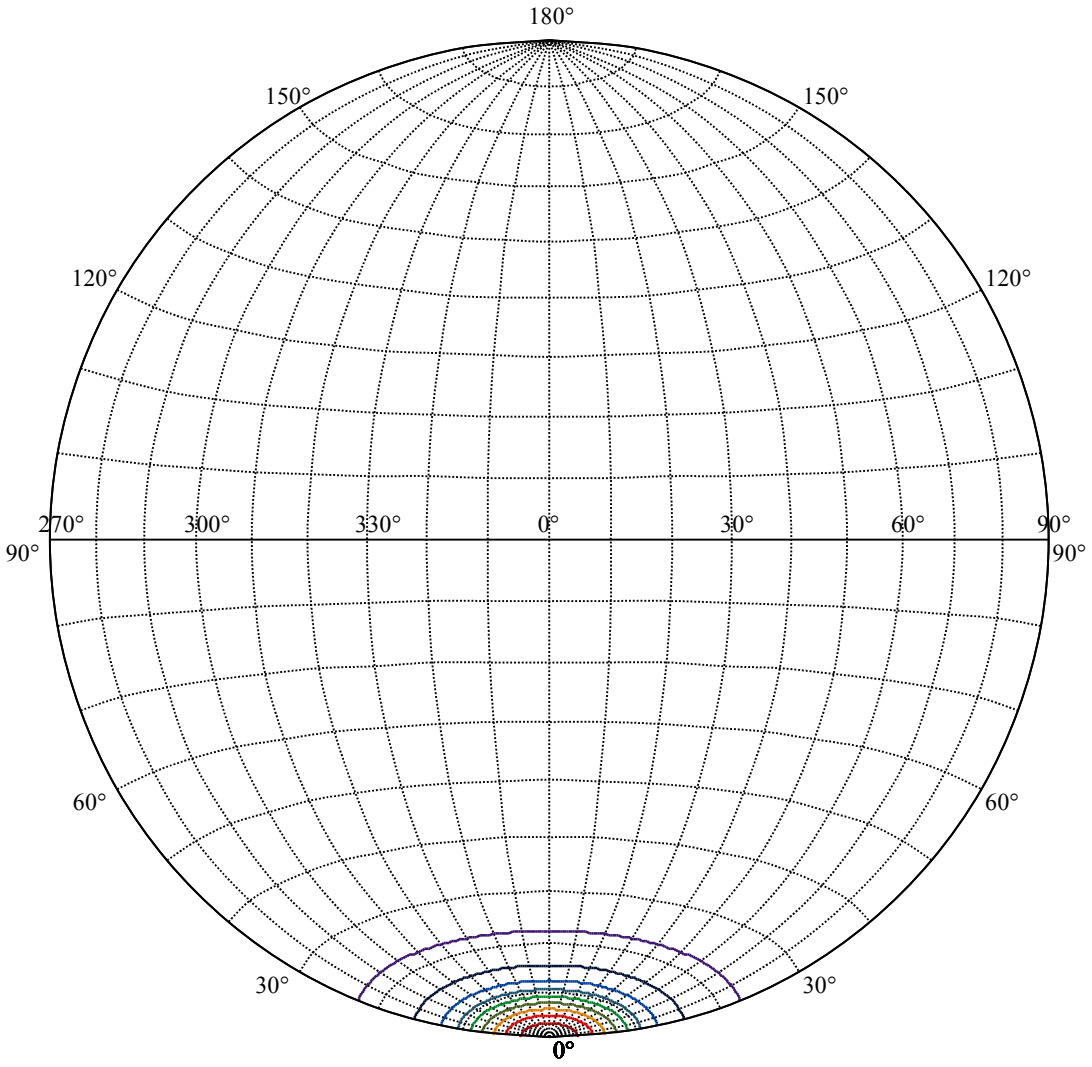


Equipment: GMS 1800
Temperature(°C): 25.0

Date: 2024/8/31
Humidity(%): 60.0%

Operator: NT
Distance(m): 7.25

ISO candela diagram on circular web



House [Unit:cd] Road

Imax:12898.89

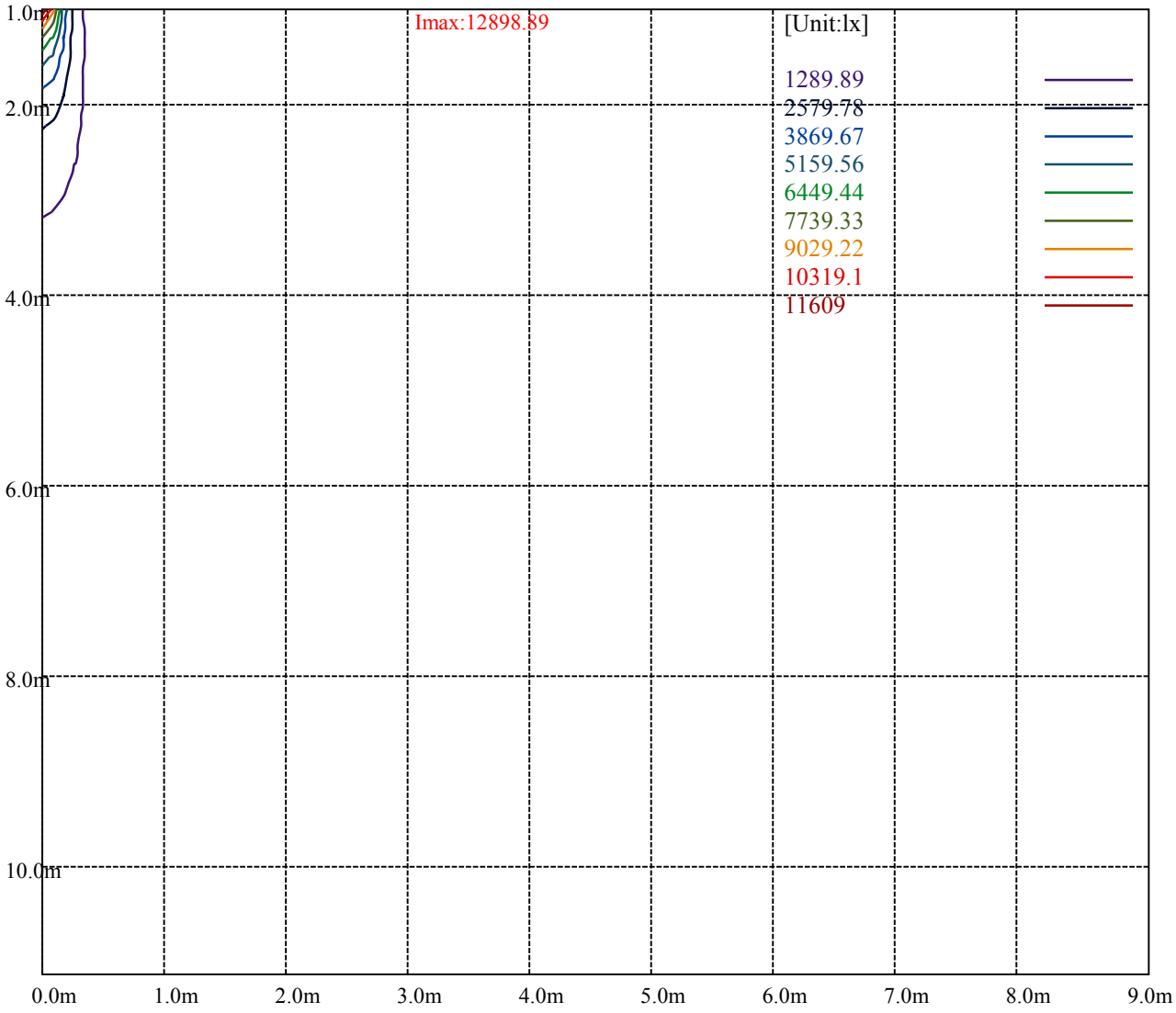
(10%Imax) 1289.89
(20%Imax) 2579.78
(30%Imax) 3869.67
(40%Imax) 5159.56
(50%Imax) 6449.44
(60%Imax) 7739.33
(70%Imax) 9029.22
(80%Imax) 10319.1
(90%Imax) 11609

Equipment: GMS 1800
Temperature(°C): 25.0

Date: 2024/8/31
Humidity(%): 60.0%

Operator: NT
Distance(m): 7.25

Space ISO Lux diagram



Equipment: GMS 1800
Temperature(°C): 25.0

Date: 2024/8/31
Humidity(%): 60.0%

Operator: NT
Distance(m): 7.25

Nata 2-2751-L

Luminance Limitting Curve(no luminous side)

Luminance Table

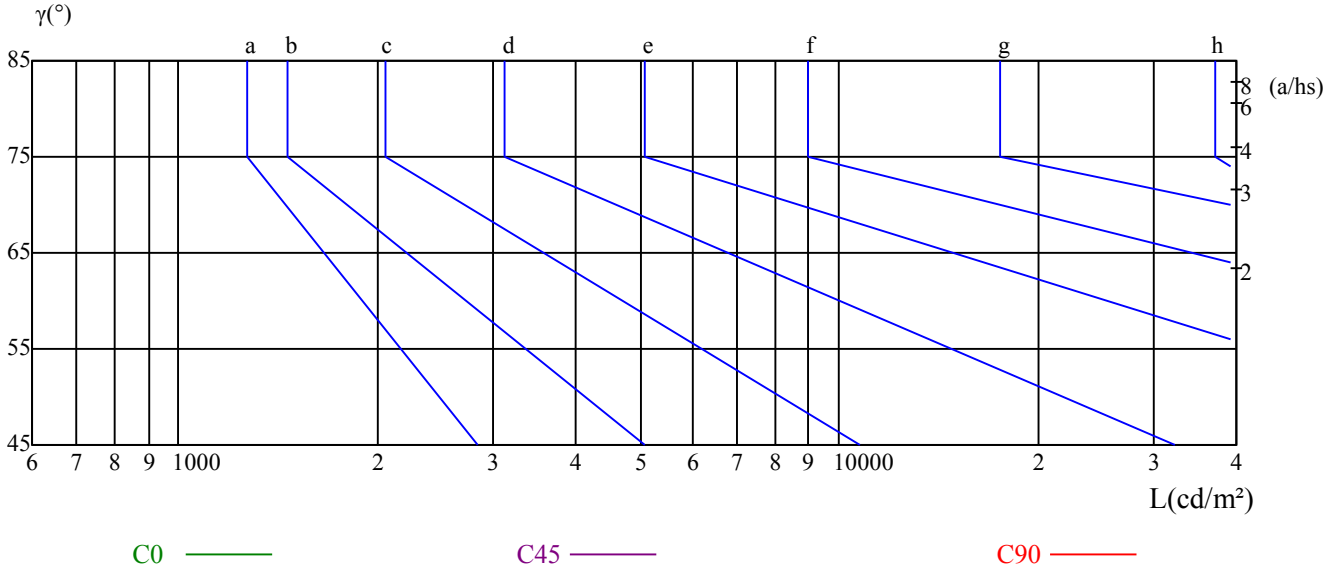
γ	45	50	55	60	65	70	75	80	85
C0	0	0	0	0	0	0	0	0	0
C45	0	0	0	0	0	0	0	0	0
C90	0	0	0	0	0	0	0	0	0

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



Equipment: GMS 1800
Temperature(°C): 25.0

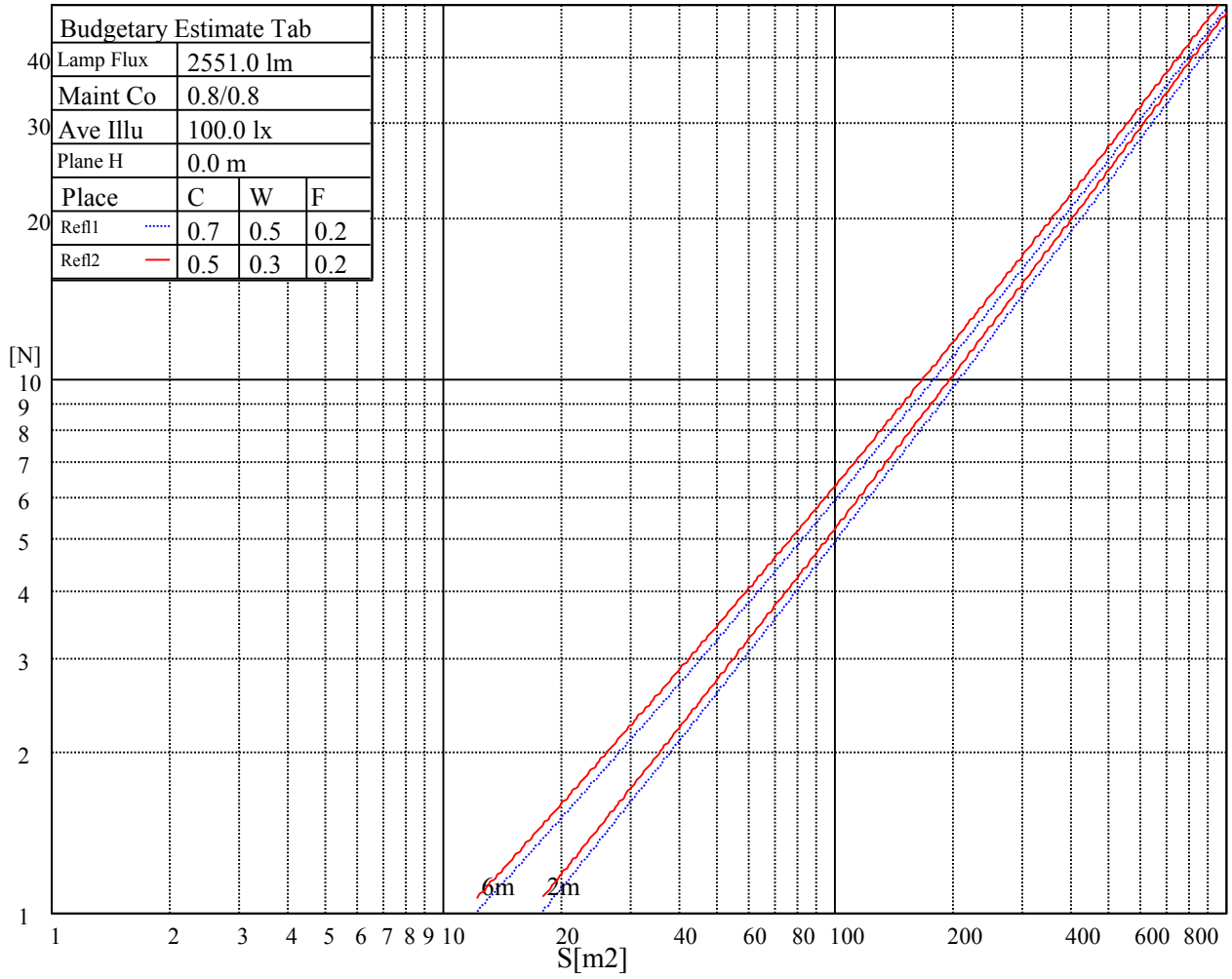
Date: 2024/8/31
Humidity(%): 60.0%

Operator: NT
Distance(m): 7.25

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: GMS 1800
Temperature(°C): 25.0

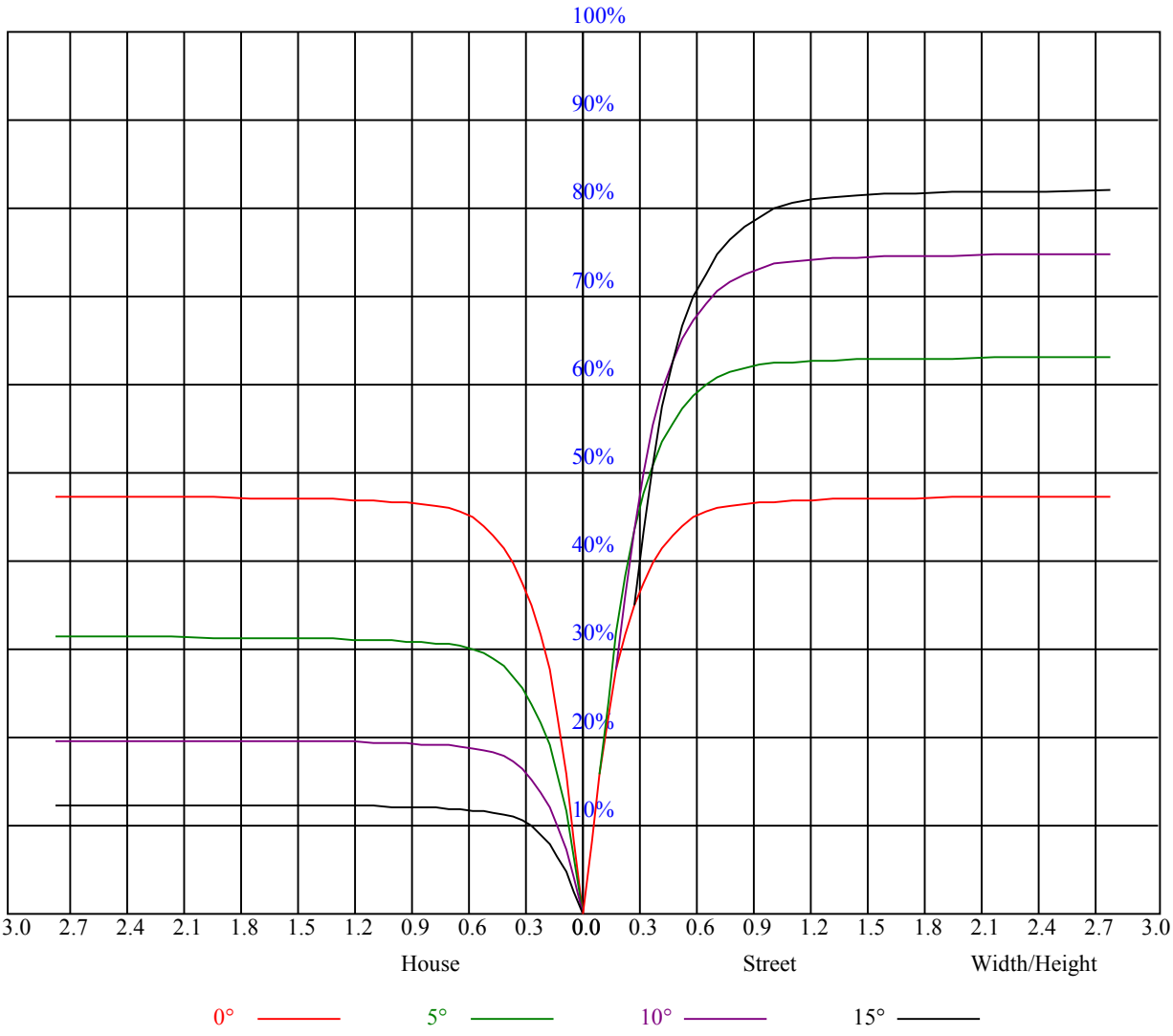
Date: 2024/8/31
Humidity(%): 60.0%

Operator: NT
Distance(m): 7.25

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	1.13	1.13	1.13	1.10	1.10	1.10	1.05	1.05	1.05	1.01	1.01	1.01	0.97	0.97	0.97	0.95
1	1.06	1.05	1.03	1.04	1.03	1.01	1.01	0.99	0.98	0.97	0.96	0.95	0.94	0.93	0.92	0.91
2	1.01	0.98	0.95	0.99	0.96	0.94	0.96	0.94	0.92	0.94	0.92	0.90	0.91	0.90	0.88	0.87
3	0.96	0.92	0.89	0.95	0.91	0.89	0.92	0.90	0.87	0.90	0.88	0.86	0.88	0.86	0.85	0.83
4	0.92	0.88	0.84	0.91	0.87	0.84	0.89	0.86	0.83	0.87	0.84	0.82	0.85	0.83	0.81	0.80
5	0.88	0.84	0.80	0.87	0.83	0.80	0.85	0.82	0.79	0.84	0.81	0.79	0.83	0.80	0.78	0.77
6	0.84	0.80	0.77	0.84	0.80	0.77	0.82	0.79	0.76	0.81	0.78	0.76	0.80	0.77	0.75	0.74
7	0.81	0.77	0.74	0.81	0.77	0.74	0.80	0.76	0.73	0.79	0.75	0.73	0.78	0.75	0.73	0.72
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	0.66	0.72	0.69	0.66	0.72	0.68	0.66	0.71	0.68	0.66	0.65

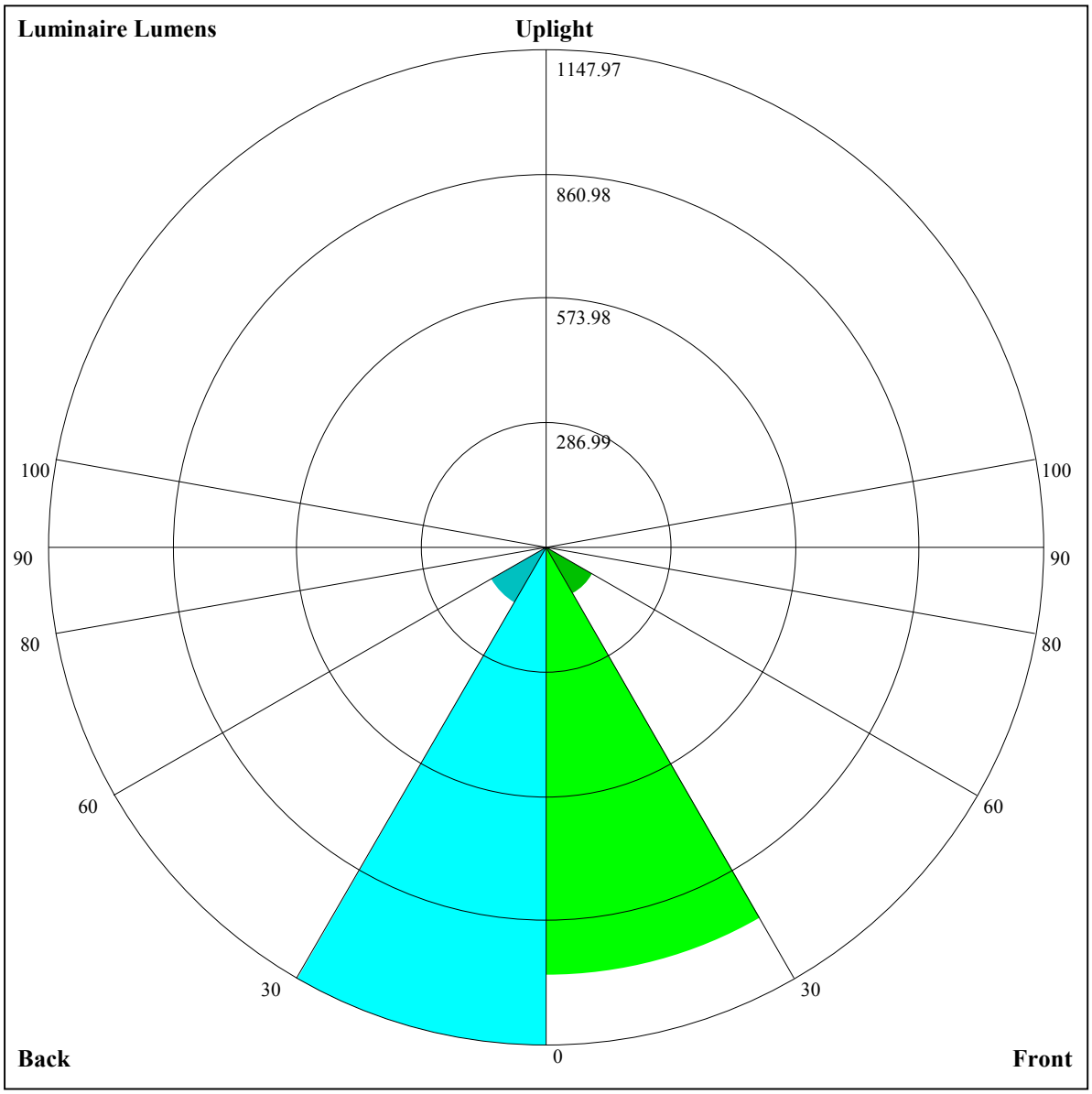
Coefficient Utilization Curve



Equipment: GMS 1800
Temperature(°C): 25.0

Date: 2024/8/31
Humidity(%): 60.0%

Operator: NT
Distance(m): 7.25



Luminaire Lumens:
FL=988.04,FM=121.9,FH=9.5,FVH=1.05
BL=1147.97,BM=149.57,BH=10.72,BVH=1.26
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	12650.95	11036.60	10661.04	10469.92	9444.22	8346.03	7277.96	6278.96	5366.89
45.0	13079.97	12745.67	12221.94	11475.34	10583.88	9603.27	8555.81	7497.20	6488.74
90.0	12829.24	12338.94	10853.26	10853.26	9870.97	8827.40	7764.37	6759.22	6006.53
135.0	13035.39	13052.11	12806.96	12255.37	11742.78	10951.61	9993.29	8956.97	7903.93
180.0	12650.95	12996.39	13124.54	12946.25	12600.81	12049.22	11609.06	10388.87	9759.28
225.0	13079.97	13191.40	13052.11	12650.95	11110.14	10938.52	10551.29	9508.82	8430.71
270.0	12829.24	13063.25	13085.54	12851.53	12394.66	12021.36	10907.03	10333.16	9280.12
315.0	13035.39	12812.53	12383.51	10904.51	10904.51	9925.59	8863.61	7798.33	6752.55
360.0	12650.95	11036.60	10661.04	10469.92	9444.22	8346.03	7277.96	6278.96	5366.89

C/γ(°)	9.0	10.0	11.0	12.0	13.0	14.0	15.0	16.0	17.0
0.0	4574.62	4008.52	3449.68	3008.41	2635.69	2327.57	2073.49	1861.24	1691.30
45.0	5574.99	4744.82	4042.79	3480.06	3201.48	2939.61	2939.61	2165.42	1926.94
90.0	4958.48	4367.31	3737.19	3245.79	2815.09	2463.50	2191.07	1954.80	1764.26
135.0	6862.03	5914.86	5067.97	4326.95	3725.21	3240.48	2844.89	2844.89	2239.53
180.0	8722.96	7636.49	6605.74	5658.56	4833.96	4126.37	3541.35	3084.47	2766.89
225.0	7342.61	6325.74	5395.86	4577.93	3916.59	3390.65	2949.33	2587.76	2273.54
270.0	8215.94	7151.76	6148.87	5257.41	4488.52	3864.50	3357.48	2928.47	2928.47
315.0	5810.94	4967.94	4255.35	3670.86	3196.17	2954.38	2591.12	2294.67	2043.95
360.0	4574.62	4008.52	3449.68	3008.41	2635.69	2327.57	2073.49	1861.24	1691.30

C/γ(°)	18.0	19.0	20.0	21.0	22.0	23.0	24.0	25.0	26.0
0.0	1554.22	1438.32	1331.93	1241.63	1080.58	1080.58	999.48	945.44	827.86
45.0	1729.73	1572.04	1440.58	1326.36	1228.28	1140.24	1059.45	980.34	904.55
90.0	1608.83	1489.57	1380.40	1291.78	1104.23	1088.94	1055.98	1008.04	927.10
135.0	2003.31	1879.06	1702.97	1565.94	1444.47	1339.71	1245.57	1156.95	1075.64
180.0	2766.89	2072.96	1872.91	1699.08	1557.01	1489.57	1338.03	1277.32	1188.70
225.0	2021.66	1891.30	1635.59	1549.23	1422.18	1304.60	1091.14	1091.14	1025.60
270.0	2235.06	1999.95	1801.58	1641.68	1558.69	1389.86	1287.36	1226.07	1135.24
315.0	1835.59	1671.22	1533.62	1417.14	1308.49	1093.46	1093.46	1022.45	935.61
360.0	1554.22	1438.32	1331.93	1241.63	1080.58	1080.58	999.48	945.44	827.86

C/γ(°)	27.0	28.0	29.0	30.0	31.0	32.0	33.0	34.0	35.0
0.0	777.66	690.15	557.32	501.97	417.71	350.91	296.08	248.99	207.04
45.0	830.49	750.22	666.12	581.97	495.61	416.51	363.57	306.18	296.14
90.0	813.30	758.27	668.33	572.93	481.63	401.68	338.66	285.68	240.74
135.0	995.38	912.91	829.33	740.19	648.25	555.80	466.07	388.65	326.78
180.0	1106.28	1018.24	932.41	844.94	757.48	668.33	575.82	485.05	404.78
225.0	941.97	859.34	780.19	692.35	605.05	516.74	435.90	363.15	305.91
270.0	1050.57	965.84	880.05	794.27	703.44	610.93	516.79	434.32	360.79
315.0	846.10	754.53	701.87	571.93	483.31	432.96	336.82	303.39	255.24
360.0	777.66	690.15	557.32	501.97	417.71	350.91	296.08	248.99	207.04

C/γ(°)	36.0	37.0	38.0	39.0	40.0	41.0	42.0	43.0	44.0
0.0	171.62	141.08	115.58	94.67	77.53	64.23	53.51	45.73	39.84
45.0	276.64	178.50	147.91	121.63	100.87	83.89	70.28	59.55	51.20
90.0	201.00	166.31	137.29	112.80	92.77	76.53	63.55	53.30	45.57
135.0	284.99	284.99	200.58	166.36	137.08	113.01	93.14	76.43	62.76
180.0	338.50	287.78	287.78	203.42	175.93	145.13	115.58	99.19	82.10
225.0	276.69	216.45	194.53	161.63	133.67	110.01	90.83	75.32	62.71
270.0	305.07	284.47	241.89	177.35	151.59	118.84	101.34	83.31	68.17
315.0	213.04	177.61	146.65	120.63	99.40	81.79	67.54	56.82	48.41
360.0	171.62	141.08	115.58	94.67	77.53	64.23	53.51	45.73	39.84

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	35.48	32.96	30.28	28.75	26.96	25.60	24.91	24.02	23.50
45.0	44.68	39.95	36.48	34.69	31.22	30.17	28.75	27.49	26.39
90.0	40.05	35.85	33.53	30.54	28.75	27.12	25.97	24.70	23.86
135.0	52.62	44.78	39.11	34.90	32.06	29.70	27.49	26.44	24.81
180.0	67.96	56.98	48.73	42.42	37.63	34.11	31.54	29.28	27.17
225.0	53.09	45.62	40.16	36.22	33.17	30.85	28.70	26.86	25.76
270.0	56.40	47.31	40.47	35.53	31.91	29.28	27.28	25.49	24.18
315.0	42.10	37.27	33.64	31.01	28.80	27.49	25.23	24.34	23.71
360.0	35.48	32.96	30.28	28.75	26.96	25.60	24.91	24.02	23.50

C/γ(°)	54.0	55.0	56.0	57.0	58.0	59.0	60.0	61.0	62.0
0.0	23.23	22.86	22.71	22.55	21.97	20.97	19.97	18.08	15.77
45.0	25.76	25.28	24.70	24.23	23.76	23.07	21.87	20.50	18.40
90.0	23.55	23.18	22.60	22.34	21.92	20.92	19.71	18.40	16.14
135.0	23.71	23.18	22.81	22.60	22.29	22.02	21.87	21.29	20.03
180.0	25.86	24.76	23.65	23.18	22.81	22.55	22.18	22.18	21.45
225.0	25.23	24.02	23.65	23.50	23.13	22.81	22.71	22.02	20.92
270.0	23.39	22.65	22.18	22.18	22.02	21.81	21.87	21.87	20.76
315.0	22.86	22.71	22.50	22.23	22.02	21.76	20.87	19.71	18.50
360.0	23.23	22.86	22.71	22.55	21.97	20.97	19.97	18.08	15.77

C/γ(°)	63.0	64.0	65.0	66.0	67.0	68.0	69.0	70.0	71.0
0.0	14.03	12.19	10.67	9.67	8.83	8.20	7.52	7.25	6.57
45.0	15.93	13.98	12.25	10.83	9.78	8.88	8.25	7.73	6.99
90.0	14.14	12.40	10.83	9.78	8.88	8.46	7.52	7.15	6.68
135.0	18.82	17.03	14.93	13.19	11.62	10.35	9.46	8.62	7.99
180.0	20.50	19.76	18.40	16.29	14.24	12.56	10.88	9.83	8.99
225.0	19.71	17.98	15.72	13.93	12.14	10.62	9.62	8.78	7.99
270.0	20.08	18.98	15.98	14.77	12.98	11.30	9.88	8.94	8.20
315.0	16.56	14.51	12.93	11.35	10.14	9.25	8.57	7.88	7.46
360.0	14.03	12.19	10.67	9.67	8.83	8.20	7.52	7.25	6.57

C/γ(°)	72.0	73.0	74.0	75.0	76.0	77.0	78.0	79.0	80.0
0.0	6.10	5.89	5.47	5.05	4.73	4.31	3.89	3.47	3.10
45.0	6.68	6.20	5.83	5.47	5.05	4.63	4.26	3.89	3.36
90.0	5.99	5.83	5.41	4.99	4.63	4.26	3.84	3.47	3.15
135.0	7.46	6.94	6.47	5.99	5.68	5.26	4.78	4.52	4.10
180.0	8.25	7.62	7.10	6.62	6.15	5.73	5.31	5.05	4.63
225.0	7.46	6.94	6.52	6.04	5.62	5.26	4.99	4.57	4.15
270.0	7.57	6.99	6.52	6.04	5.68	5.26	4.94	4.57	4.15
315.0	6.83	6.47	6.04	5.62	5.20	4.84	4.52	4.10	3.68
360.0	6.10	5.89	5.47	5.05	4.73	4.31	3.89	3.47	3.10

C/γ(°)	81.0	82.0	83.0	84.0	85.0	86.0	87.0	88.0	89.0
0.0	2.79	2.42	2.05	1.79	1.52	1.37	1.10	0.84	0.89
45.0	3.00	2.68	2.26	1.94	1.68	1.37	1.16	1.00	0.89
90.0	2.73	2.42	2.10	1.84	1.52	1.37	1.16	0.95	0.79
135.0	3.78	3.26	2.94	2.47	2.21	1.89	1.68	1.42	1.21
180.0	4.21	3.84	3.57	3.05	2.63	2.21	2.00	1.73	1.47
225.0	3.78	3.36	2.89	2.63	2.21	1.89	1.58	1.37	1.16
270.0	3.84	3.42	3.00	2.63	2.21	1.94	1.68	1.37	1.21
315.0	3.26	2.89	2.52	2.21	1.89	1.68	1.37	1.21	0.95
360.0	2.79	2.42	2.05	1.79	1.52	1.37	1.10	0.84	0.89

Intensity data(cd)

C/γ(°)	90.0
0.0	0.89
45.0	0.89
90.0	0.79
135.0	0.95
180.0	1.26
225.0	1.05
270.0	1.05
315.0	0.68
360.0	0.89