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: 2-2521-L
Luminaire: 92.70.411.00
Report No: 2024906-B017
Ballast type: AC

Test No: 2024906-C017	Voltage(V): 34.200
LampCAT: NICHIA NFCWJ108B-V3	Current(A): 0.563
Lamp flux(lm): 2557.0	Power (W): 19.250
Number of Lamps: 1	PF: 0.000
Length(mm): 0	Width(mm): 0
Phm Type: C	Height(mm): 0

Photometric Results

Lumens(lm): 2320.67, Efficiency(%): 90.76% , Luminous Efficacy(lm/W): 120.55
Central intensity(cd): 3927.457, Maximum intensity(cd): 3927.457
Angle of maximum intensity: C=0.0 γ=0.0
Beam Angle(50%Imax): [C0/180]Total=48.4
[C90/270]Total=48.4
Field angle(10%Imax): [C0/180]Total=69.4
[C90/270]Total=69.4
Maximum s/h(1/2): C0_180=0.75 C90_270=0.75
Maximum s/h(1/4): C0_180=0.74 C90_270=0.74
Up flux rate of lamp(%): 0.00%
Down flux rate of lamp(%): 90.76%
Up flux rate of LUM(%): - -
Down flux rate of LUM(%): 100.00%
CIE Type : Direct lighting
Output flux ratio in π solid angle : 99.197%

Zonal flux distribution table

γ(°)	Average I(cd)	Zonal F(lm)	Sum F(lm)	Eff Flux(%)	Eff Sum(%)
0.0	3927.457	0.000	0	0.00%	0.00%
1.0	3918.403	3.754	3.754	0.15%	0.16%
2.0	3893.331	11.212	14.966	0.44%	0.64%
3.0	3855.026	18.532	33.498	0.72%	1.44%
4.0	3802.995	25.634	59.132	1.00%	2.55%
5.0	3745.538	32.473	91.605	1.27%	3.95%
6.0	3677.161	39.008	130.613	1.53%	5.63%
7.0	3599.296	45.165	175.778	1.77%	7.57%
8.0	3527.069	51.002	226.78	1.99%	9.77%
9.0	3450.170	56.547	283.327	2.21%	12.21%
10.0	3376.221	61.776	345.103	2.42%	14.87%
11.0	3296.615	66.675	411.779	2.61%	17.74%
12.0	3217.765	71.211	482.99	2.78%	20.81%
13.0	3131.891	75.354	558.344	2.95%	24.06%
14.0	3046.720	79.086	637.43	3.09%	27.47%
15.0	2960.984	82.476	719.906	3.23%	31.02%
16.0	2862.652	85.333	805.239	3.34%	34.70%
17.0	2768.690	87.695	892.934	3.43%	38.48%
18.0	2669.373	89.662	982.596	3.51%	42.34%
19.0	2547.428	90.762	1073.358	3.55%	46.25%
20.0	2447.284	91.417	1164.775	3.58%	50.19%
21.0	2333.972	91.810	1256.585	3.59%	54.15%
22.0	2229.077	91.696	1348.281	3.59%	58.10%
23.0	2108.183	91.007	1439.288	3.56%	62.02%
24.0	1986.304	89.520	1528.809	3.50%	65.88%
25.0	1854.596	87.334	1616.142	3.42%	69.64%
26.0	1688.840	83.643	1699.785	3.27%	73.25%
27.0	1562.578	79.547	1779.332	3.11%	76.67%
28.0	1364.536	74.108	1853.44	2.90%	79.87%
29.0	1195.002	66.965	1920.405	2.62%	82.75%
30.0	1046.651	60.524	1980.929	2.37%	85.36%
31.0	865.343	53.208	2034.137	2.08%	87.65%
32.0	727.826	45.642	2079.78	1.78%	89.62%
33.0	589.258	38.802	2118.582	1.52%	91.29%
34.0	471.913	32.114	2150.696	1.26%	92.68%
35.0	363.167	25.935	2176.63	1.01%	93.79%
36.0	281.597	20.529	2197.16	0.80%	94.68%
37.0	218.739	16.318	2213.478	0.64%	95.38%

Zonal flux distribution table

γ(°)	Average I(cd)	Zonal F(lm)	Sum F(lm)	Eff Flux(%)	Eff Sum(%)
38.0	154.711	12.465	2225.943	0.49%	95.92%
39.0	130.966	9.751	2235.694	0.38%	96.34%
40.0	113.042	8.510	2244.204	0.33%	96.71%
41.0	83.798	7.009	2251.214	0.27%	97.01%
42.0	71.649	5.648	2256.861	0.22%	97.25%
43.0	61.439	4.930	2261.791	0.19%	97.46%
44.0	53.594	4.342	2266.133	0.17%	97.65%
45.0	46.938	3.864	2269.996	0.15%	97.82%
46.0	41.807	3.471	2273.467	0.14%	97.97%
47.0	37.444	3.152	2276.619	0.12%	98.10%
48.0	33.817	2.881	2279.5	0.11%	98.23%
49.0	30.788	2.653	2282.153	0.10%	98.34%
50.0	28.239	2.461	2284.614	0.10%	98.45%
51.0	25.729	2.283	2286.897	0.09%	98.54%
52.0	23.679	2.120	2289.018	0.08%	98.64%
53.0	22.030	1.988	2291.006	0.08%	98.72%
54.0	20.309	1.866	2292.872	0.07%	98.80%
55.0	18.968	1.753	2294.625	0.07%	98.88%
56.0	17.595	1.652	2296.278	0.06%	98.95%
57.0	16.426	1.556	2297.833	0.06%	99.02%
58.0	15.401	1.472	2299.305	0.06%	99.08%
59.0	14.415	1.394	2300.699	0.05%	99.14%
60.0	13.673	1.327	2302.026	0.05%	99.20%
61.0	12.884	1.267	2303.293	0.05%	99.25%
62.0	12.149	1.206	2304.499	0.05%	99.30%
63.0	11.498	1.150	2305.649	0.04%	99.35%
64.0	10.880	1.098	2306.747	0.04%	99.40%
65.0	10.322	1.049	2307.797	0.04%	99.45%
66.0	9.763	1.002	2308.799	0.04%	99.49%
67.0	9.231	0.955	2309.754	0.04%	99.53%
68.0	8.739	0.910	2310.664	0.04%	99.57%
69.0	8.259	0.867	2311.531	0.03%	99.61%
70.0	7.799	0.825	2312.356	0.03%	99.64%
71.0	7.352	0.783	2313.139	0.03%	99.68%
72.0	6.905	0.741	2313.881	0.03%	99.71%
73.0	6.439	0.698	2314.578	0.03%	99.74%
74.0	5.972	0.652	2315.231	0.03%	99.77%
75.0	5.512	0.607	2315.838	0.02%	99.79%

Zonal flux distribution table

γ(°)	Average I(cd)	Zonal F(lm)	Sum F(lm)	Eff Flux(%)	Eff Sum(%)
76.0	5.112	0.564	2316.402	0.02%	99.82%
77.0	4.717	0.524	2316.926	0.02%	99.84%
78.0	4.363	0.486	2317.412	0.02%	99.86%
79.0	3.955	0.447	2317.859	0.02%	99.88%
80.0	3.627	0.409	2318.267	0.02%	99.90%
81.0	3.318	0.376	2318.643	0.01%	99.91%
82.0	2.996	0.342	2318.985	0.01%	99.93%
83.0	2.674	0.308	2319.294	0.01%	99.94%
84.0	2.392	0.276	2319.57	0.01%	99.95%
85.0	2.122	0.246	2319.816	0.01%	99.96%
86.0	1.859	0.218	2320.034	0.01%	99.97%
87.0	1.603	0.189	2320.223	0.01%	99.98%
88.0	1.413	0.165	2320.388	0.01%	99.99%
89.0	1.262	0.147	2320.535	0.01%	99.99%
90.0	1.130	0.131	2320.666	0.01%	100.00%

Zonal flux distribution table

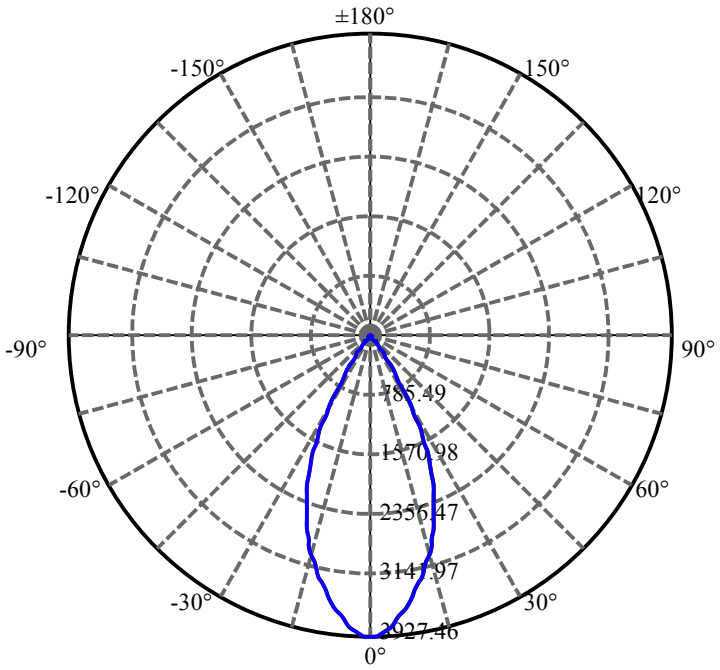
ZONAL LUMEN SUMMARY

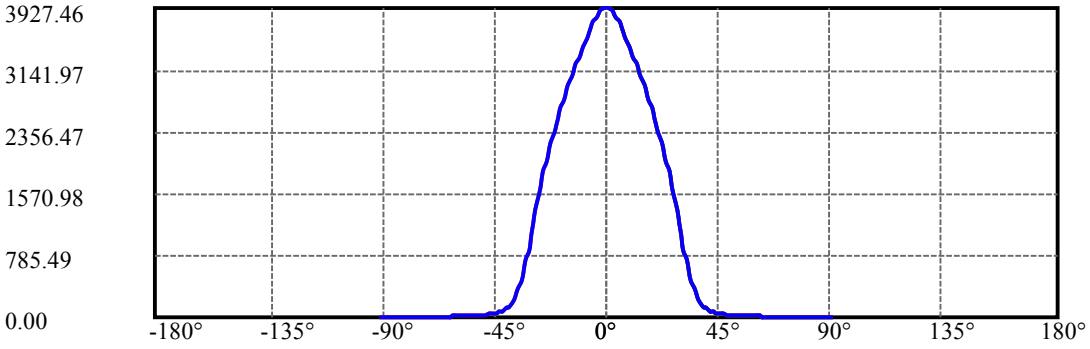
Zone	Lumens	%Lamp	%Fixt
0-30	1980.93	77.47%	85.36%
0-40	2244.20	87.77%	96.71%
0-60	2302.03	90.03%	99.20%
0-90	2320.53	90.75%	99.99%
0-120	2320.53	90.75%	99.99%
0-180	2320.67	90.76%	100.00%
60-90	18.51	0.72%	0.80%
90-120	0.00	0.00%	0.00%
90-130	0.00	0.00%	0.00%
90-150	0.00	0.00%	0.00%
90-180	0.00	0.00%	0.00%
0-28.05	1856.53	72.61%	80.00%

ZONAL LUMEN SUMMARY

0-10	345.10
10-20	819.67
20-30	816.15
30-40	263.27
40-50	40.41
50-60	17.41
60-70	10.33
70-80	5.91
80-90	2.27
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):

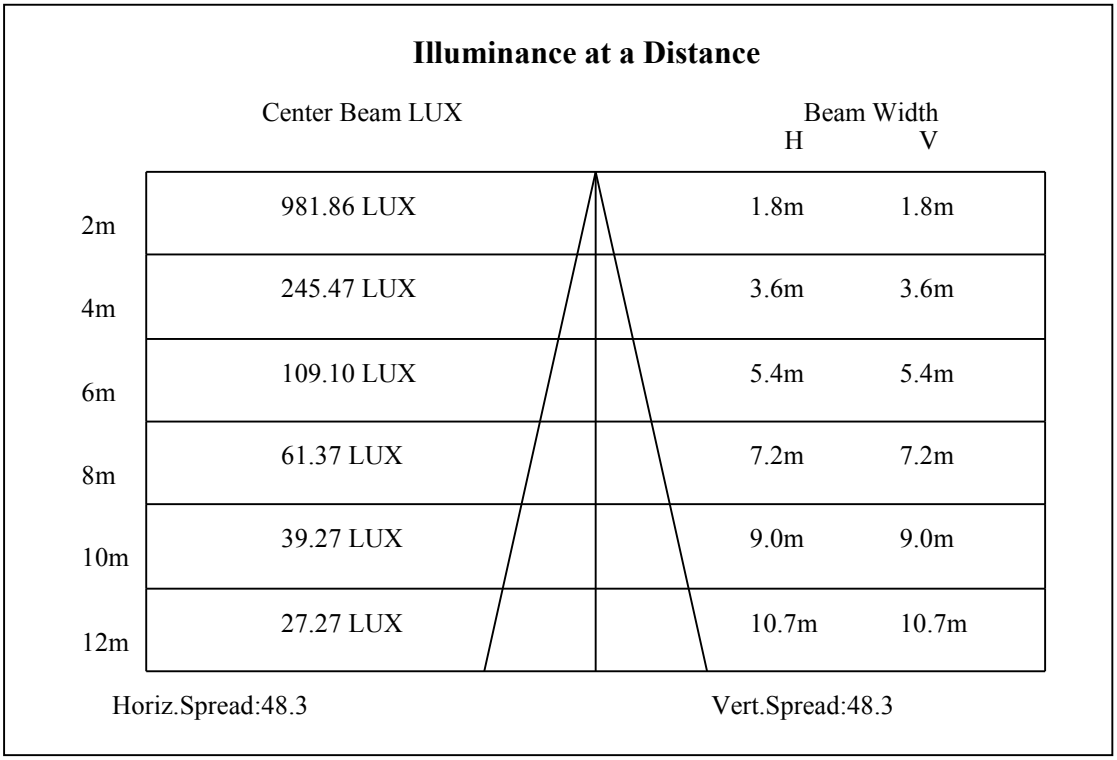
C0/C180:

C90/C270:

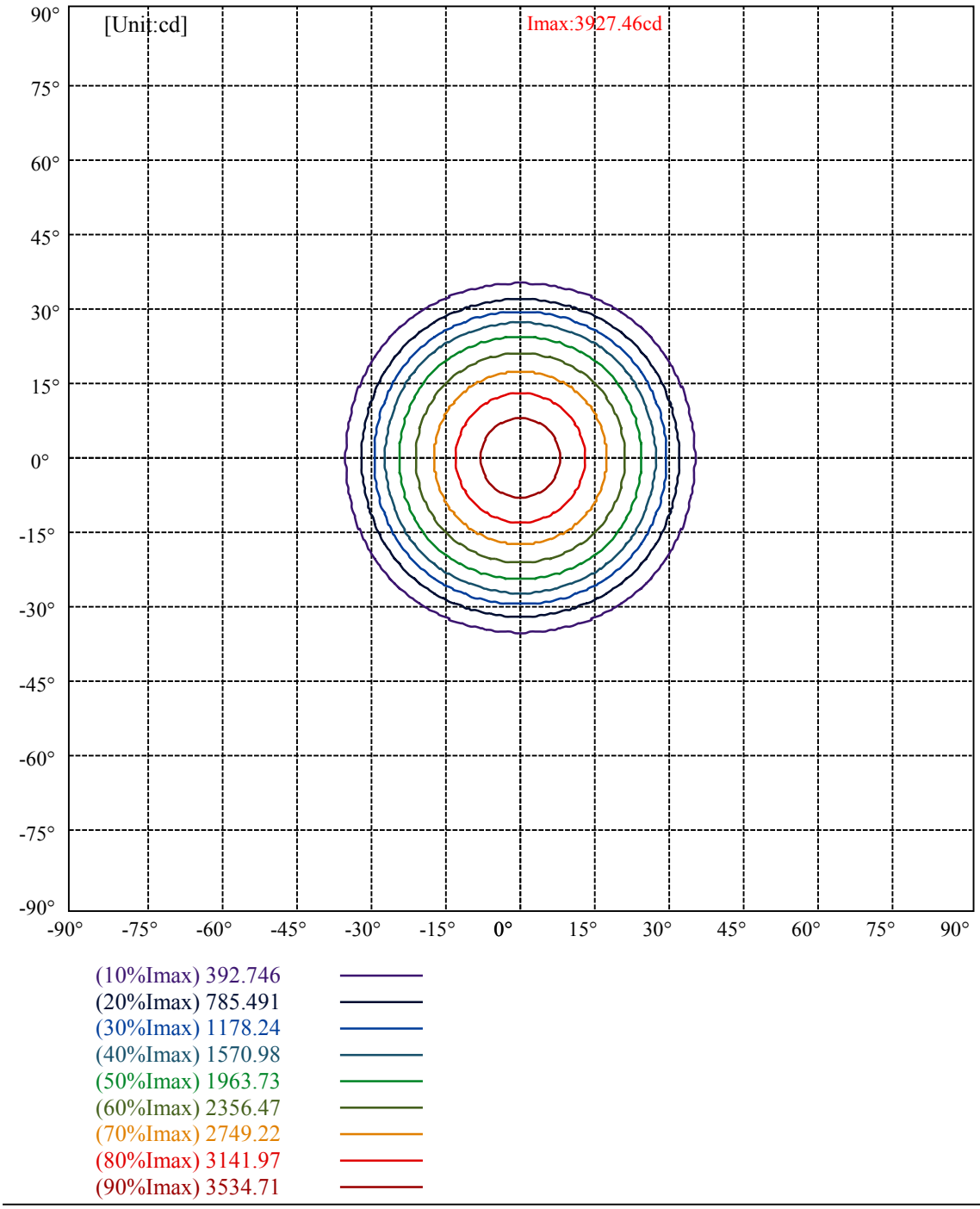
Field angle(10%Imax):C0/180Left:34.7 Right:34.7
:C90/270Left:34.7 Right:34.7

Beam Angle(50%Imax):C0/180Left:24.2 Right:24.2
:C90/270Left:24.2 Right:24.2

Lux distance Curve



ISO-Intensity(V-H)

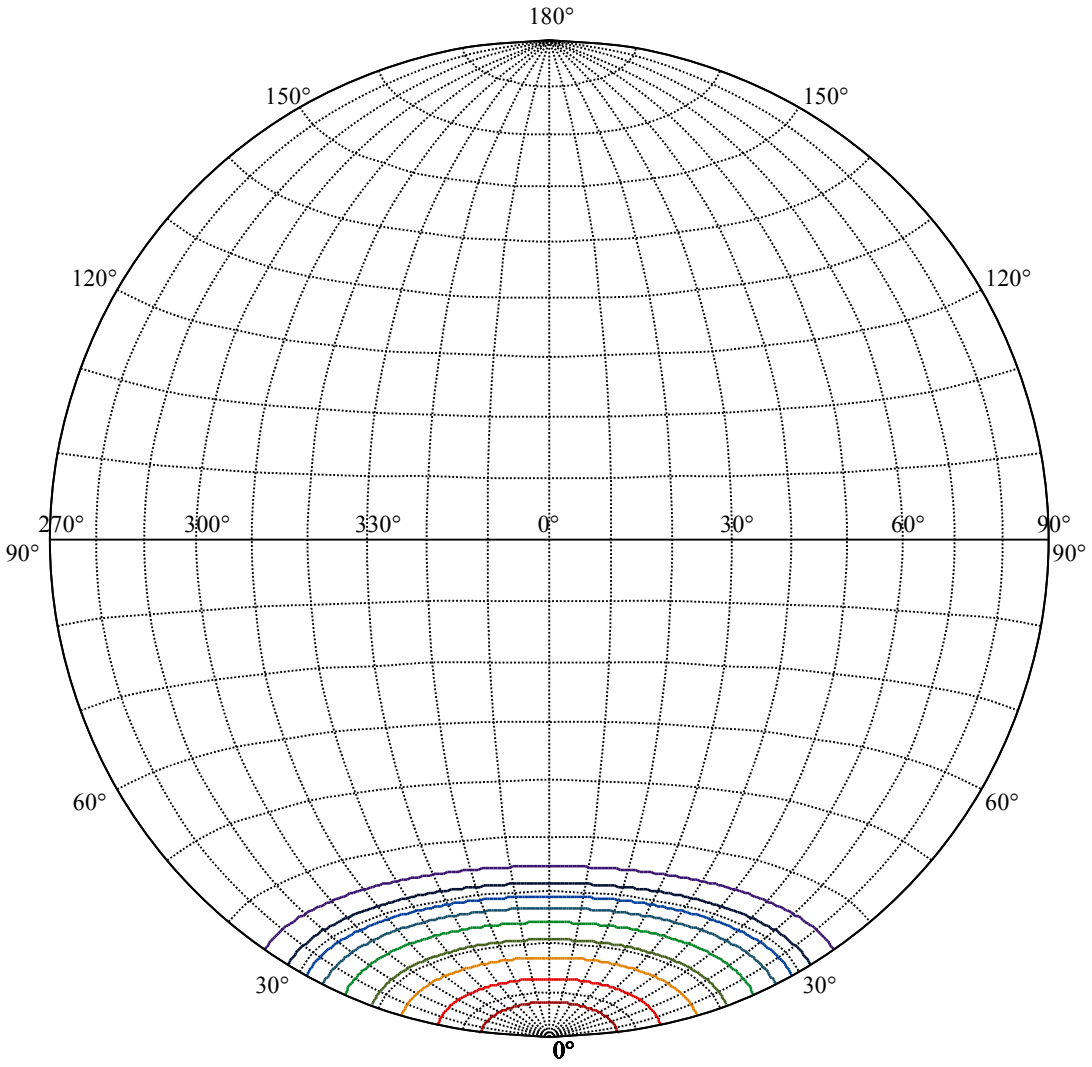


Equipment: GMS 1800
Temperature(°C): 25.0

Date: 2024/9/6
Humidity(%): 60.0%

Operator: NT
Distance(m): 7.25

ISO candela diagram on circular web



House [Unit:cd] Road

Imax:3927.46

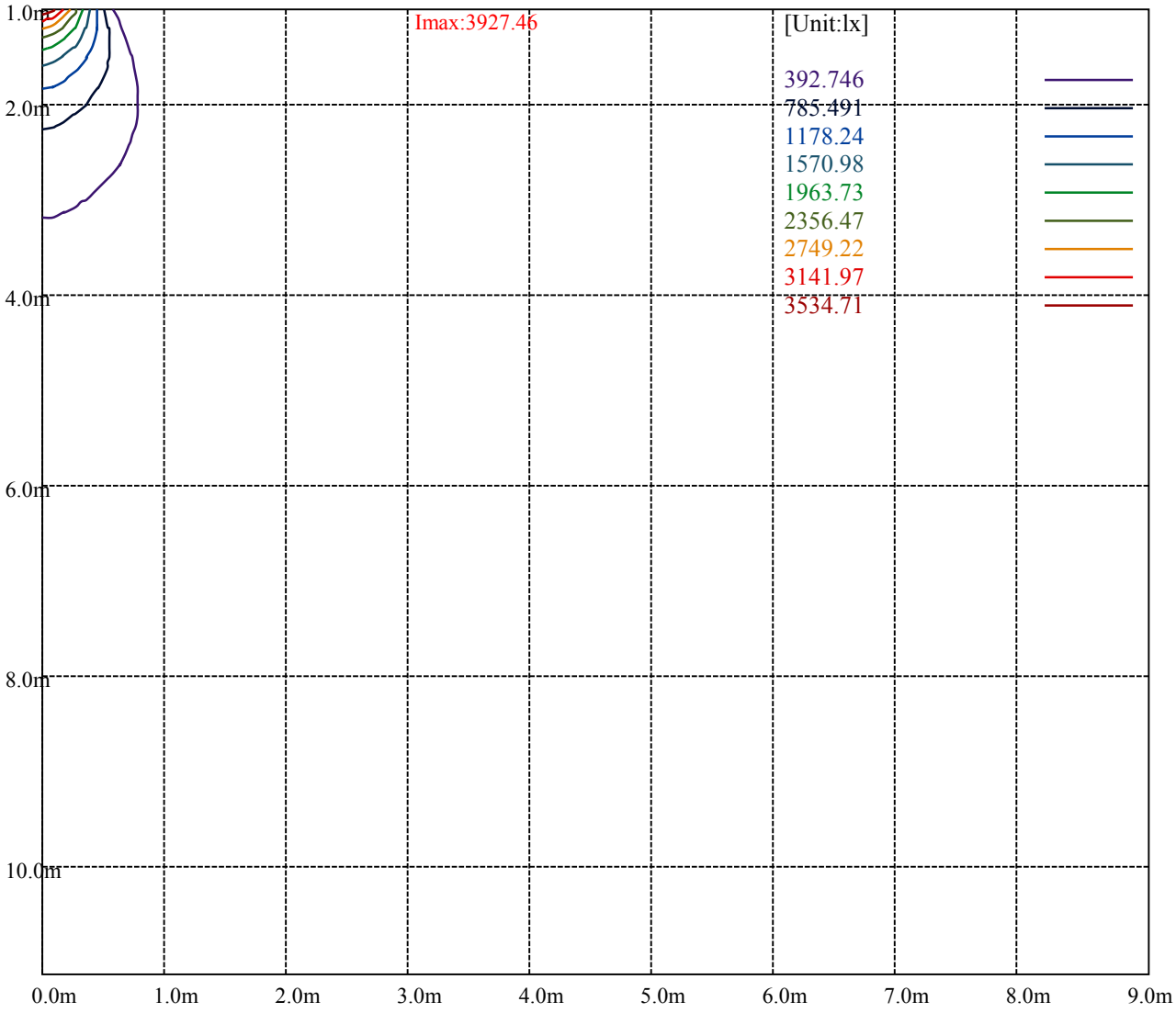
(10%Imax) 392.746
(20%Imax) 785.491
(30%Imax) 1178.24
(40%Imax) 1570.98
(50%Imax) 1963.73
(60%Imax) 2356.47
(70%Imax) 2749.22
(80%Imax) 3141.97
(90%Imax) 3534.71

Equipment: GMS 1800
Temperature(°C): 25.0

Date: 2024/9/6
Humidity(%): 60.0%

Operator: NT
Distance(m): 7.25

Space ISO Lux diagram



Equipment: GMS 1800
Temperature(°C): 25.0

Date: 2024/9/6
Humidity(%): 60.0%

Operator: NT
Distance(m): 7.25

Nata 2-2521-L

Luminance Limitting Curve(no luminous side)

Luminance Table

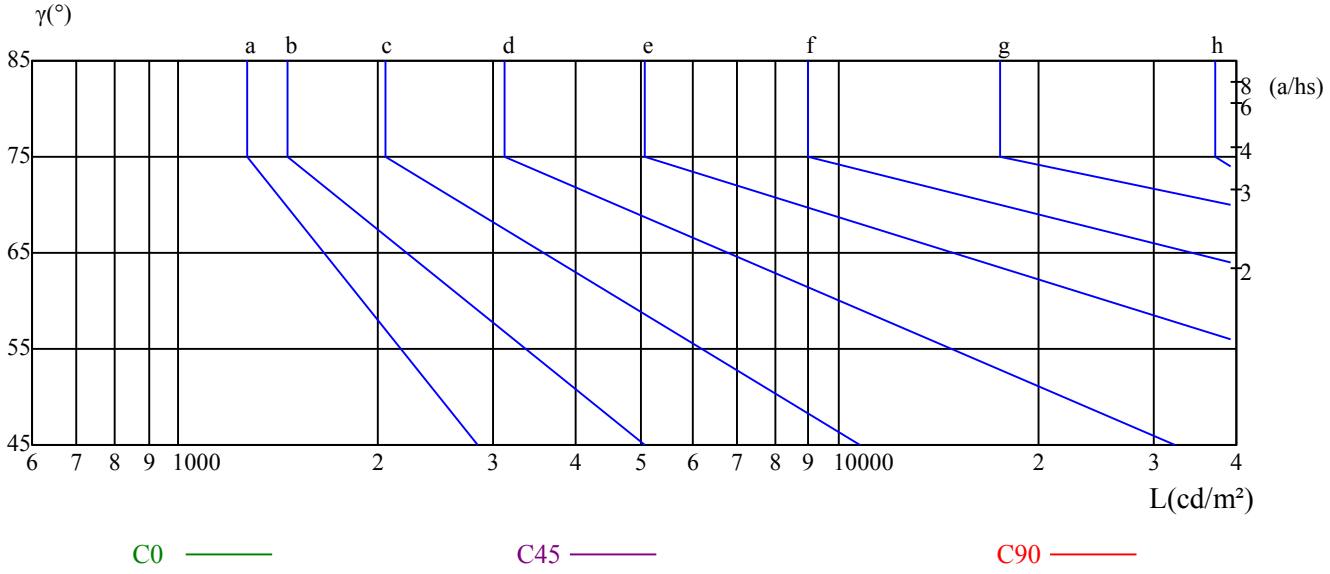
γ	45	50	55	60	65	70	75	80	85
C0	0	0	0	0	0	0	0	0	0
C45	0	0	0	0	0	0	0	0	0
C90	0	0	0	0	0	0	0	0	0

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

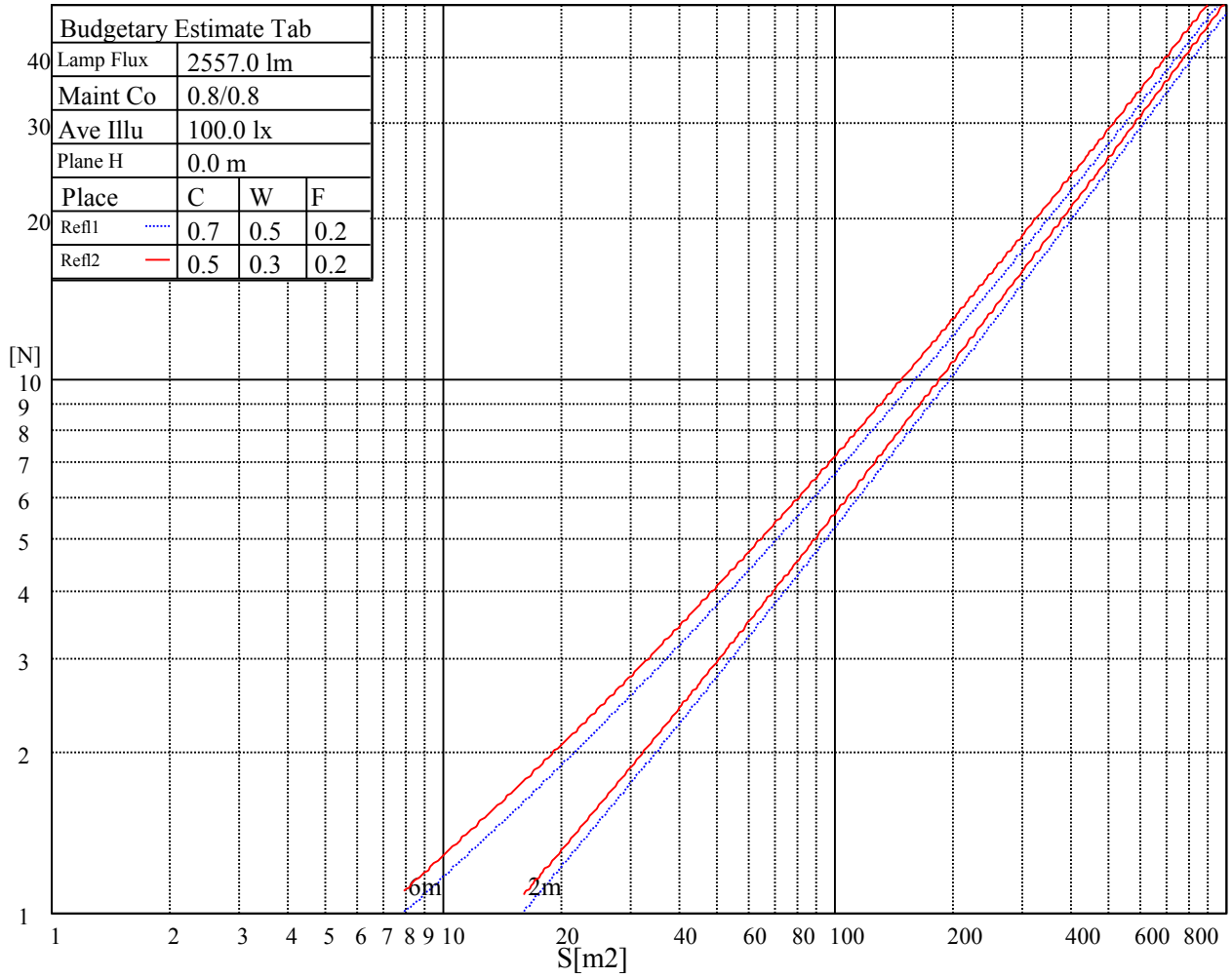
Date: 2024/9/6
Humidity(%): 60.0%

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

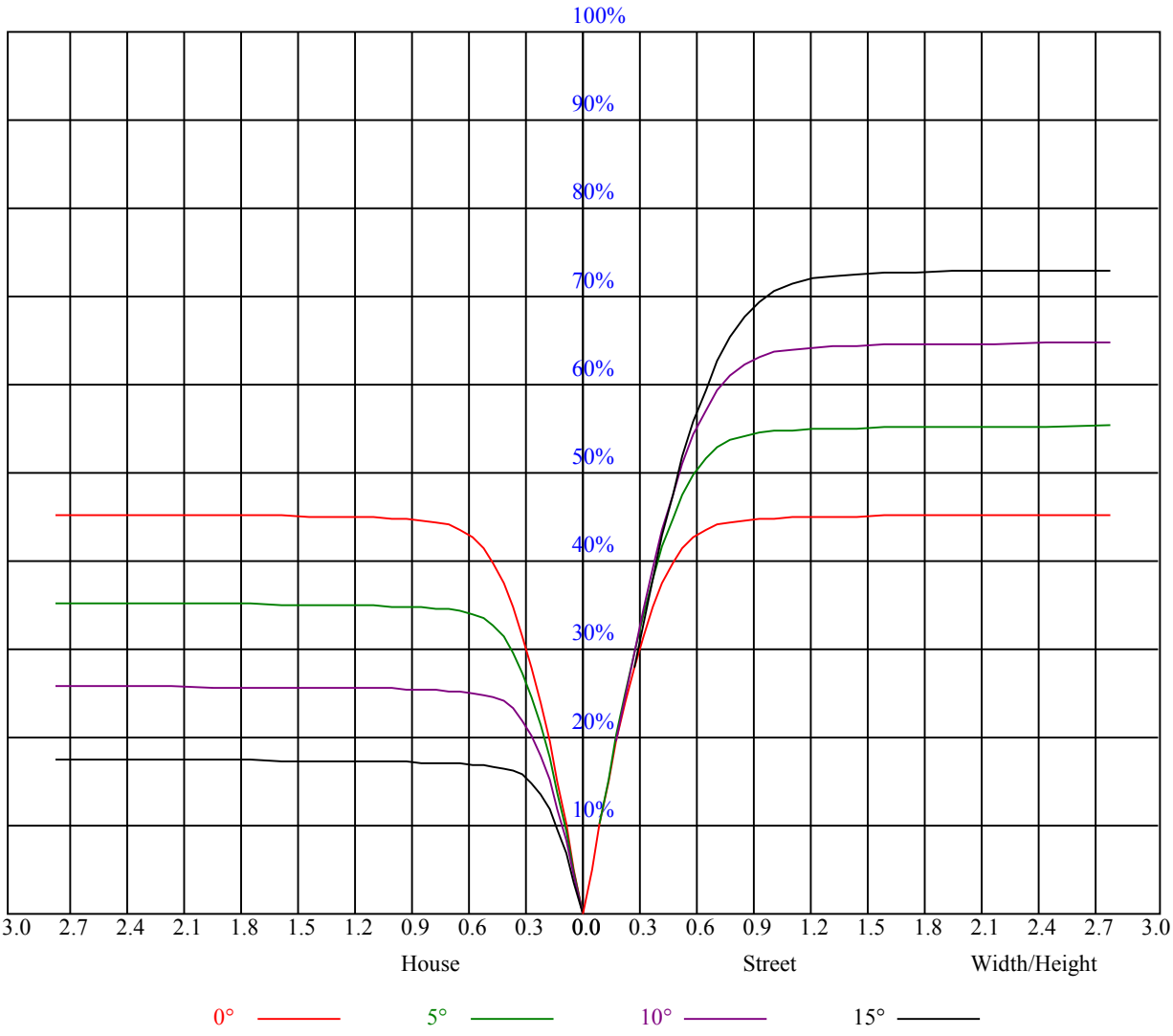
Date: 2024/9/6
Humidity(%): 60.0%

Operator: NT
Distance(m): 7.25

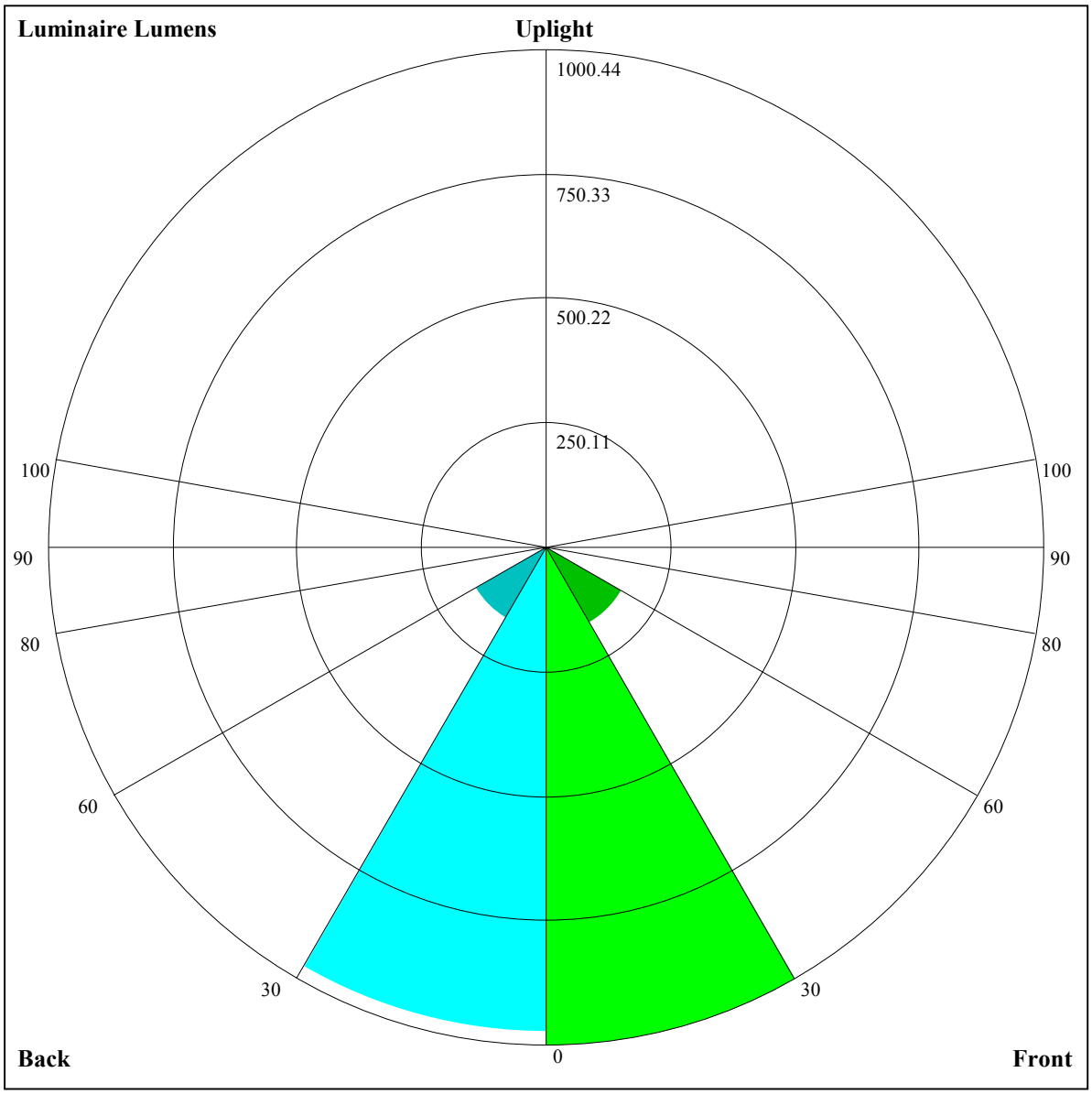
Utilization factor table for indoor luminaire

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	1.08	1.08	1.08	1.06	1.06	1.06	1.01	1.01	1.01	0.97	0.97	0.97	0.93	0.93	0.93	0.91
1	1.01	0.99	0.97	0.99	0.97	0.96	0.95	0.94	0.93	0.92	0.91	0.90	0.89	0.88	0.87	0.86
2	0.95	0.92	0.89	0.93	0.90	0.88	0.90	0.88	0.86	0.88	0.86	0.84	0.85	0.84	0.82	0.81
3	0.89	0.85	0.82	0.88	0.84	0.81	0.86	0.83	0.80	0.84	0.81	0.79	0.82	0.79	0.78	0.76
4	0.84	0.80	0.76	0.83	0.79	0.76	0.81	0.78	0.75	0.80	0.77	0.74	0.78	0.75	0.73	0.72
5	0.80	0.75	0.71	0.79	0.74	0.71	0.77	0.73	0.71	0.76	0.73	0.70	0.75	0.72	0.69	0.68
6	0.76	0.71	0.67	0.75	0.70	0.67	0.74	0.70	0.67	0.72	0.69	0.66	0.71	0.68	0.66	0.65
7	0.72	0.67	0.63	0.71	0.67	0.63	0.70	0.66	0.63	0.69	0.65	0.63	0.68	0.65	0.62	0.61
8	0.68	0.63	0.60	0.68	0.63	0.60	0.67	0.63	0.60	0.66	0.62	0.59	0.65	0.62	0.59	0.58
9	0.65	0.60	0.57	0.65	0.60	0.57	0.64	0.60	0.57	0.63	0.59	0.57	0.62	0.59	0.56	0.55
10	0.62	0.57	0.54	0.62	0.57	0.54	0.61	0.57	0.54	0.60	0.57	0.54	0.60	0.56	0.54	0.53

Coefficient Utilization Curve



Equipment: GMS 1800	Date: 2024/9/6	Operator: NT
Temperature(°C): 25.0	Humidity(%): 60.0%	Distance(m): 7.25



Luminaire Lumens:
FL=1000.44,FM=174.32,FH=8.1,FVH=1.21
BL=975.69,BM=162.75,BH=8.35,BVH=1.22
UL=0,UH=0

BUG Rating:B2-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	3942.77	3928.84	3895.41	3865.34	3801.27	3732.15	3670.86	3599.59	3529.36
45.0	3930.52	3922.74	3904.34	3872.02	3814.62	3753.33	3697.09	3615.72	3547.18
90.0	3897.67	3850.31	3783.45	3726.58	3656.93	3587.29	3513.22	3438.01	3368.89
135.0	3938.88	3897.67	3840.79	3780.66	3707.65	3670.33	3601.79	3525.47	3451.94
180.0	3942.77	3937.77	3895.99	3848.63	3820.19	3763.37	3680.37	3608.47	3542.19
225.0	3930.52	3914.91	3901.56	3849.15	3789.02	3724.95	3656.41	3579.51	3502.08
270.0	3897.67	3923.27	3951.70	3945.03	3927.15	3884.26	3814.09	3730.52	3655.83
315.0	3938.88	3971.73	3973.41	3952.81	3907.13	3848.63	3783.45	3697.09	3619.09
360.0	3942.77	3928.84	3895.41	3865.34	3801.27	3732.15	3670.86	3599.59	3529.36

C/γ(°)	9.0	10.0	11.0	12.0	13.0	14.0	15.0	16.0	17.0
0.0	3451.94	3375.04	3284.79	3198.95	3115.38	3030.70	2938.77	2851.83	2763.26
45.0	3464.18	3382.29	3301.50	3213.99	3122.63	3030.70	2929.83	2834.59	2732.04
90.0	3291.99	3202.32	3105.34	3017.88	2925.42	2831.23	2720.37	2595.01	2476.90
135.0	3380.03	3309.28	3229.07	3140.45	3045.73	2948.81	2860.77	2753.80	2642.37
180.0	3477.54	3399.53	3314.85	3252.46	3180.03	3110.39	3026.81	2944.34	2857.40
225.0	3425.71	3352.75	3277.53	3201.21	3126.52	3045.73	2954.91	2857.98	2764.95
270.0	3578.93	3511.54	3447.47	3376.14	3280.85	3204.00	3128.20	3051.88	2952.12
315.0	3531.04	3477.01	3412.36	3341.03	3258.56	3172.20	3128.20	3011.78	2960.48
360.0	3451.94	3375.04	3284.79	3198.95	3115.38	3030.70	2938.77	2851.83	2763.26

C/γ(°)	18.0	19.0	20.0	21.0	22.0	23.0	24.0	25.0	26.0
0.0	2703.08	2537.03	2416.72	2351.54	2189.39	2118.64	1993.80	1852.88	1694.62
45.0	2617.82	2500.29	2430.65	2269.60	2199.95	2081.84	1948.70	1806.05	1650.04
90.0	2354.33	2228.39	2098.56	1967.62	1893.51	1743.66	1585.44	1408.78	1051.04
135.0	2519.79	2378.82	2236.17	2104.71	1962.63	1826.13	1676.22	1511.86	1337.51
180.0	2749.33	2640.69	2555.43	2416.72	2292.46	2190.49	2046.21	1941.45	1799.95
225.0	2670.75	2564.89	2455.14	2366.00	2251.78	2117.53	2035.06	1925.84	1802.16
270.0	2860.19	2770.52	2685.84	2602.26	2548.76	2399.43	2334.83	2232.86	2134.25
315.0	2879.69	2758.80	2699.77	2593.33	2494.14	2387.76	2270.17	2157.06	2041.16
360.0	2703.08	2537.03	2416.72	2351.54	2189.39	2118.64	1993.80	1852.88	1694.62

C/γ(°)	27.0	28.0	29.0	30.0	31.0	32.0	33.0	34.0	35.0
0.0	1518.01	1087.52	1087.52	944.29	773.88	612.46	461.76	332.93	236.27
45.0	1486.26	1310.75	1127.99	945.23	768.04	602.05	456.03	332.93	332.93
90.0	1051.04	870.01	698.14	540.97	397.00	278.58	197.53	149.38	120.32
135.0	1202.10	995.95	859.98	697.87	548.54	413.14	293.35	293.35	147.33
180.0	1645.05	1474.54	1297.35	1116.85	937.45	768.04	614.30	473.33	344.07
225.0	1660.08	1505.18	1109.80	1075.85	1006.52	834.22	669.59	520.32	386.70
270.0	2026.70	1914.17	1785.44	1638.90	1476.80	1299.61	1114.64	936.35	758.58
315.0	1911.38	1758.16	1593.80	1413.25	1014.51	1014.51	906.86	736.72	579.13
360.0	1518.01	1087.52	1087.52	944.29	773.88	612.46	461.76	332.93	236.27

C/γ(°)	36.0	37.0	38.0	39.0	40.0	41.0	42.0	43.0	44.0
0.0	197.48	140.60	122.47	99.71	77.74	70.70	60.66	52.67	46.26
45.0	166.41	144.18	116.32	96.19	81.10	69.54	60.03	52.46	46.15
90.0	103.92	85.73	74.27	66.81	58.92	52.56	47.31	42.94	39.16
135.0	117.69	98.08	83.47	71.85	62.50	57.66	48.67	43.47	40.89
180.0	320.11	320.11	134.82	118.21	98.29	79.16	72.48	62.97	55.40
225.0	318.21	202.79	154.69	133.72	99.34	88.62	74.48	63.71	55.14
270.0	596.48	451.04	329.04	288.88	288.88	141.29	118.16	96.61	80.63
315.0	432.48	307.39	222.60	172.35	137.56	110.85	91.41	76.69	65.12
360.0	197.48	140.60	122.47	99.71	77.74	70.70	60.66	52.67	46.26

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	40.84	36.32	32.59	29.38	26.60	24.07	21.87	20.08	18.66
45.0	41.05	36.79	33.06	29.91	27.23	24.97	22.86	21.03	19.50
90.0	35.90	33.01	30.49	28.28	26.23	24.23	22.55	20.87	19.50
135.0	35.80	33.90	31.12	28.54	26.39	24.44	22.65	21.03	19.61
180.0	49.25	44.05	39.89	36.32	33.27	30.49	28.07	25.91	23.86
225.0	48.25	42.79	38.16	34.64	31.80	29.17	26.91	25.02	23.13
270.0	68.44	58.98	51.67	45.89	41.31	37.32	34.06	31.17	28.86
315.0	55.98	48.62	42.58	37.58	33.48	31.22	26.86	24.34	23.13
360.0	40.84	36.32	32.59	29.38	26.60	24.07	21.87	20.08	18.66

C/γ(°)	54.0	55.0	56.0	57.0	58.0	59.0	60.0	61.0	62.0
0.0	17.35	16.19	15.19	14.40	13.51	12.72	12.35	11.35	10.88
45.0	18.08	17.24	15.61	14.51	13.98	13.04	11.93	11.56	10.88
90.0	18.03	16.71	15.51	14.45	13.51	12.56	12.14	11.35	10.35
135.0	18.13	16.98	15.87	14.82	13.88	12.98	12.19	11.56	11.04
180.0	22.13	20.45	18.92	17.61	16.35	15.30	14.24	13.51	12.56
225.0	21.50	19.82	18.40	17.14	15.98	14.98	14.30	13.35	12.67
270.0	26.60	24.60	22.86	21.34	19.87	18.61	17.87	16.77	15.77
315.0	20.66	19.76	18.40	17.14	16.14	15.14	14.35	13.61	13.04
360.0	17.35	16.19	15.19	14.40	13.51	12.72	12.35	11.35	10.88

C/γ(°)	63.0	64.0	65.0	66.0	67.0	68.0	69.0	70.0	71.0
0.0	10.35	9.83	9.30	8.73	8.30	7.83	7.41	6.94	6.57
45.0	10.25	9.72	9.25	8.73	8.25	7.73	7.36	6.89	6.47
90.0	9.93	9.36	8.83	8.30	7.73	7.31	6.89	6.41	5.94
135.0	10.51	9.83	9.46	9.04	8.52	8.20	7.83	7.67	7.41
180.0	11.67	11.20	10.62	10.04	9.51	8.99	8.57	8.04	7.73
225.0	12.09	11.51	10.88	10.35	9.78	9.36	8.67	8.25	7.67
270.0	14.88	14.03	13.19	12.51	11.93	11.20	10.57	9.93	9.30
315.0	12.30	11.56	11.04	10.41	9.83	9.30	8.78	8.25	7.73
360.0	10.35	9.83	9.30	8.73	8.30	7.83	7.41	6.94	6.57

C/γ(°)	72.0	73.0	74.0	75.0	76.0	77.0	78.0	79.0	80.0
0.0	6.20	5.83	5.47	5.05	4.78	4.36	4.10	3.68	3.31
45.0	6.04	5.68	5.26	4.84	4.52	4.15	3.78	3.36	3.15
90.0	5.57	5.15	4.78	4.31	3.94	3.63	3.26	2.84	2.52
135.0	6.83	6.20	5.62	5.05	4.63	4.15	3.84	3.47	3.15
180.0	7.46	7.04	6.15	5.68	5.20	4.84	4.47	4.05	3.73
225.0	7.25	6.73	6.47	6.04	5.52	5.05	4.63	4.26	3.89
270.0	8.57	7.99	7.46	6.99	6.52	6.10	5.78	5.31	4.94
315.0	7.31	6.89	6.57	6.15	5.78	5.47	5.05	4.68	4.31
360.0	6.20	5.83	5.47	5.05	4.78	4.36	4.10	3.68	3.31

C/γ(°)	81.0	82.0	83.0	84.0	85.0	86.0	87.0	88.0	89.0
0.0	3.05	2.79	2.37	2.16	1.94	1.68	1.42	1.26	1.05
45.0	2.79	2.47	2.16	1.89	1.58	1.37	1.16	0.95	0.84
90.0	2.26	2.00	1.73	1.52	1.31	1.05	0.89	0.89	0.95
135.0	2.84	2.52	2.26	2.00	1.79	1.58	1.26	1.10	1.16
180.0	3.42	3.10	2.79	2.47	2.16	1.94	1.68	1.47	1.26
225.0	3.57	3.26	2.94	2.68	2.37	2.05	1.89	1.58	1.37
270.0	4.57	4.21	3.78	3.42	3.15	2.79	2.42	2.16	1.89
315.0	4.05	3.63	3.36	3.00	2.68	2.42	2.10	1.89	1.58
360.0	3.05	2.79	2.37	2.16	1.94	1.68	1.42	1.26	1.05

Intensity data(cd)

C/γ(°)	90.0
0.0	0.89
45.0	0.84
90.0	0.89
135.0	1.10
180.0	1.00
225.0	1.26
270.0	1.58
315.0	1.47
360.0	0.89