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: 2-2519-L
Luminaire: 92.70.411.00
Report No: 2024906-B012
Ballast type: AC

Test No: 2024906-C012	Voltage(V): 34.230
LampCAT: NICHIA NFCWJ108B-V3	Current(A): 0.563
Lamp flux(lm): 2557.0	Power (W): 19.260
Number of Lamps: 1	PF: 0.000
Length(mm): 0	Width(mm): 0
Phm Type: C	Height(mm): 0

Photometric Results

Lumens(lm): 2304.45, Efficiency(%): 90.12% , Luminous Efficacy(lm/W): 119.65
Central intensity(cd): 7742.207, Maximum intensity(cd): 7742.207
Angle of maximum intensity: C=0.0 γ=0.0
Beam Angle(50%Imax): [C0/180]Total=26.4
[C90/270]Total=26.4
Field angle(10%Imax): [C0/180]Total=57.0
[C90/270]Total=57.0
Maximum s/h(1/2): C0_180=0.44 C90_270=0.44
Maximum s/h(1/4): C0_180=0.48 C90_270=0.48
Up flux rate of lamp(%): 0.00%
Down flux rate of lamp(%): 90.12%
Up flux rate of LUM(%): - -
Down flux rate of LUM(%): 100.00%
CIE Type : Direct lighting
Output flux ratio in π solid angle : 99.057%

Nata 2-2519-L

Zonal flux distribution table

γ(°)	Average I(cd)	Zonal F(lm)	Sum F(lm)	Eff Flux(%)	Eff Sum(%)
0.0	7742.207	0.000	0	0.00%	0.00%
1.0	7715.117	7.396	7.396	0.29%	0.32%
2.0	7616.431	22.005	29.401	0.86%	1.28%
3.0	7449.210	36.032	65.433	1.41%	2.84%
4.0	7271.693	49.276	114.709	1.93%	4.98%
5.0	6979.932	61.310	176.019	2.40%	7.64%
6.0	6703.933	71.912	247.931	2.81%	10.76%
7.0	6370.056	81.150	329.081	3.17%	14.28%
8.0	5977.532	88.369	417.45	3.46%	18.11%
9.0	5587.939	93.732	511.182	3.67%	22.18%
10.0	5164.561	97.306	608.488	3.81%	26.40%
11.0	4743.082	98.998	707.486	3.87%	30.70%
12.0	4330.775	99.190	806.676	3.88%	35.01%
13.0	3956.294	98.347	905.023	3.85%	39.27%
14.0	3568.567	96.318	1001.341	3.77%	43.45%
15.0	3250.294	93.612	1094.953	3.66%	47.51%
16.0	2937.797	90.673	1185.626	3.55%	51.45%
17.0	2632.888	86.751	1272.376	3.39%	55.21%
18.0	2406.686	83.092	1355.468	3.25%	58.82%
19.0	2176.712	79.742	1435.21	3.12%	62.28%
20.0	1968.262	75.865	1511.074	2.97%	65.57%
21.0	1780.916	71.992	1583.066	2.82%	68.70%
22.0	1585.535	67.650	1650.716	2.65%	71.63%
23.0	1444.299	63.574	1714.29	2.49%	74.39%
24.0	1302.505	60.055	1774.345	2.35%	77.00%
25.0	1164.049	56.084	1830.429	2.19%	79.43%
26.0	1044.634	52.136	1882.566	2.04%	81.69%
27.0	946.145	48.705	1931.271	1.90%	83.81%
28.0	830.652	44.985	1976.255	1.76%	85.76%
29.0	719.587	40.559	2016.814	1.59%	87.52%
30.0	614.620	36.023	2052.837	1.41%	89.08%
31.0	516.118	31.467	2084.304	1.23%	90.45%
32.0	423.995	26.933	2111.237	1.05%	91.62%
33.0	342.326	22.576	2133.813	0.88%	92.60%
34.0	286.459	19.029	2152.842	0.74%	93.42%
35.0	215.769	15.597	2168.439	0.61%	94.10%
36.0	188.384	12.868	2181.308	0.50%	94.66%
37.0	152.182	11.107	2192.415	0.43%	95.14%

Zonal flux distribution table

γ(°)	Average I(cd)	Zonal F(lm)	Sum F(lm)	Eff Flux(%)	Eff Sum(%)
38.0	119.934	9.083	2201.498	0.36%	95.53%
39.0	105.729	7.703	2209.201	0.30%	95.87%
40.0	93.975	6.965	2216.166	0.27%	96.17%
41.0	83.863	6.333	2222.498	0.25%	96.44%
42.0	75.887	5.804	2228.302	0.23%	96.70%
43.0	68.114	5.334	2233.637	0.21%	96.93%
44.0	60.460	4.853	2238.489	0.19%	97.14%
45.0	55.118	4.442	2242.931	0.17%	97.33%
46.0	49.764	4.102	2247.033	0.16%	97.51%
47.0	45.059	3.771	2250.804	0.15%	97.67%
48.0	41.064	3.482	2254.286	0.14%	97.82%
49.0	37.484	3.226	2257.511	0.13%	97.96%
50.0	34.389	2.997	2260.508	0.12%	98.09%
51.0	31.715	2.797	2263.305	0.11%	98.21%
52.0	29.409	2.623	2265.928	0.10%	98.33%
53.0	27.457	2.474	2268.401	0.10%	98.44%
54.0	25.861	2.350	2270.751	0.09%	98.54%
55.0	24.231	2.236	2272.987	0.09%	98.63%
56.0	22.884	2.129	2275.116	0.08%	98.73%
57.0	21.721	2.039	2277.156	0.08%	98.82%
58.0	20.414	1.948	2279.104	0.08%	98.90%
59.0	19.323	1.858	2280.962	0.07%	98.98%
60.0	18.082	1.767	2282.729	0.07%	99.06%
61.0	16.919	1.670	2284.399	0.07%	99.13%
62.0	15.815	1.577	2285.977	0.06%	99.20%
63.0	14.777	1.488	2287.465	0.06%	99.26%
64.0	13.850	1.405	2288.869	0.05%	99.32%
65.0	12.760	1.317	2290.186	0.05%	99.38%
66.0	11.932	1.232	2291.418	0.05%	99.43%
67.0	11.130	1.160	2292.578	0.05%	99.48%
68.0	10.342	1.088	2293.665	0.04%	99.53%
69.0	9.612	1.018	2294.683	0.04%	99.58%
70.0	8.916	0.952	2295.635	0.04%	99.62%
71.0	8.272	0.888	2296.523	0.03%	99.66%
72.0	7.641	0.827	2297.351	0.03%	99.69%
73.0	7.057	0.769	2298.119	0.03%	99.73%
74.0	6.439	0.709	2298.829	0.03%	99.76%
75.0	5.940	0.654	2299.483	0.03%	99.78%

Zonal flux distribution table

γ(°)	Average I(cd)	Zonal F(lm)	Sum F(lm)	Eff Flux(%)	Eff Sum(%)
76.0	5.414	0.603	2300.086	0.02%	99.81%
77.0	4.934	0.552	2300.637	0.02%	99.83%
78.0	4.520	0.506	2301.143	0.02%	99.86%
79.0	4.100	0.463	2301.607	0.02%	99.88%
80.0	3.739	0.423	2302.029	0.02%	99.89%
81.0	3.384	0.385	2302.414	0.02%	99.91%
82.0	3.029	0.348	2302.762	0.01%	99.93%
83.0	2.707	0.312	2303.074	0.01%	99.94%
84.0	2.424	0.280	2303.353	0.01%	99.95%
85.0	2.109	0.247	2303.601	0.01%	99.96%
86.0	1.886	0.218	2303.819	0.01%	99.97%
87.0	1.629	0.192	2304.012	0.01%	99.98%
88.0	1.406	0.166	2304.178	0.01%	99.99%
89.0	1.216	0.144	2304.322	0.01%	99.99%
90.0	1.150	0.130	2304.451	0.01%	100.00%

Zonal flux distribution table

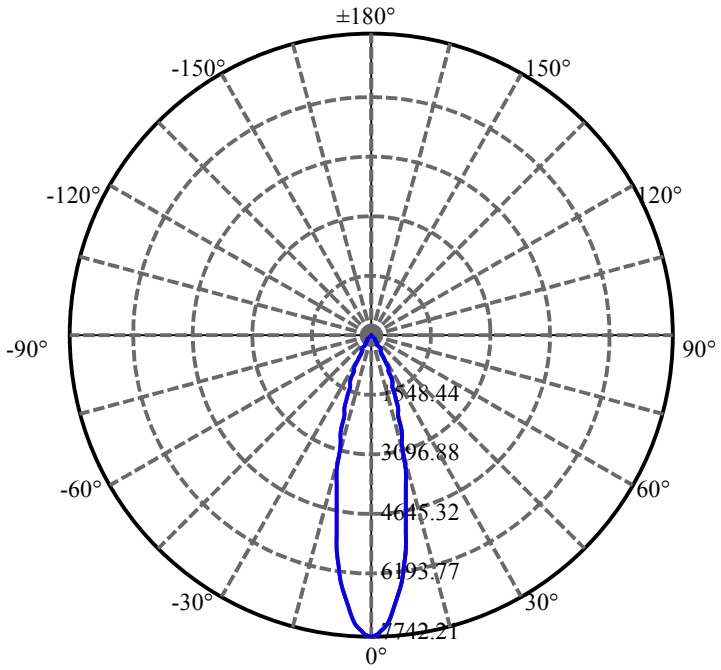
ZONAL LUMEN SUMMARY

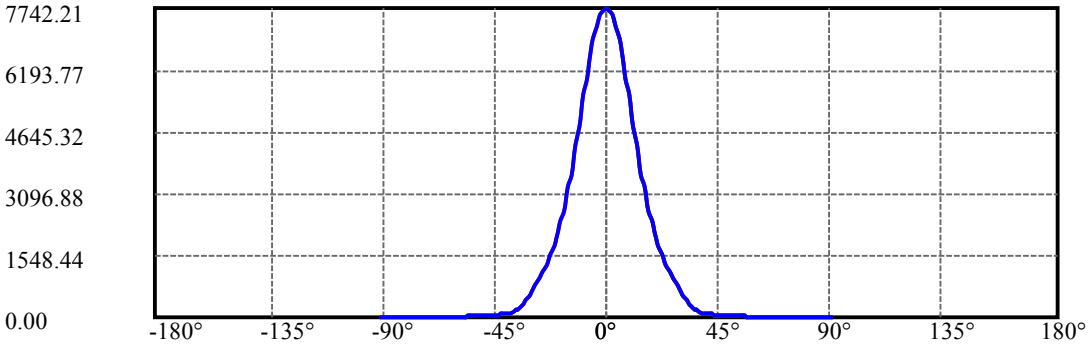
Zone	Lumens	%Lamp	%Fixt
0-30	2052.84	80.28%	89.08%
0-40	2216.17	86.67%	96.17%
0-60	2282.73	89.27%	99.06%
0-90	2304.32	90.12%	99.99%
0-120	2304.32	90.12%	99.99%
0-180	2304.45	90.12%	100.00%
60-90	21.59	0.84%	0.94%
90-120	0.00	0.00%	0.00%
90-130	0.00	0.00%	0.00%
90-150	0.00	0.00%	0.00%
90-180	0.00	0.00%	0.00%
0-25.25	1843.56	72.10%	80.00%

ZONAL LUMEN SUMMARY

0-10	608.49
10-20	902.59
20-30	541.76
30-40	163.33
40-50	44.34
50-60	22.22
60-70	12.91
70-80	6.39
80-90	2.29
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:28.5 Right:28.5
:C90/270Left:28.5 Right:28.5

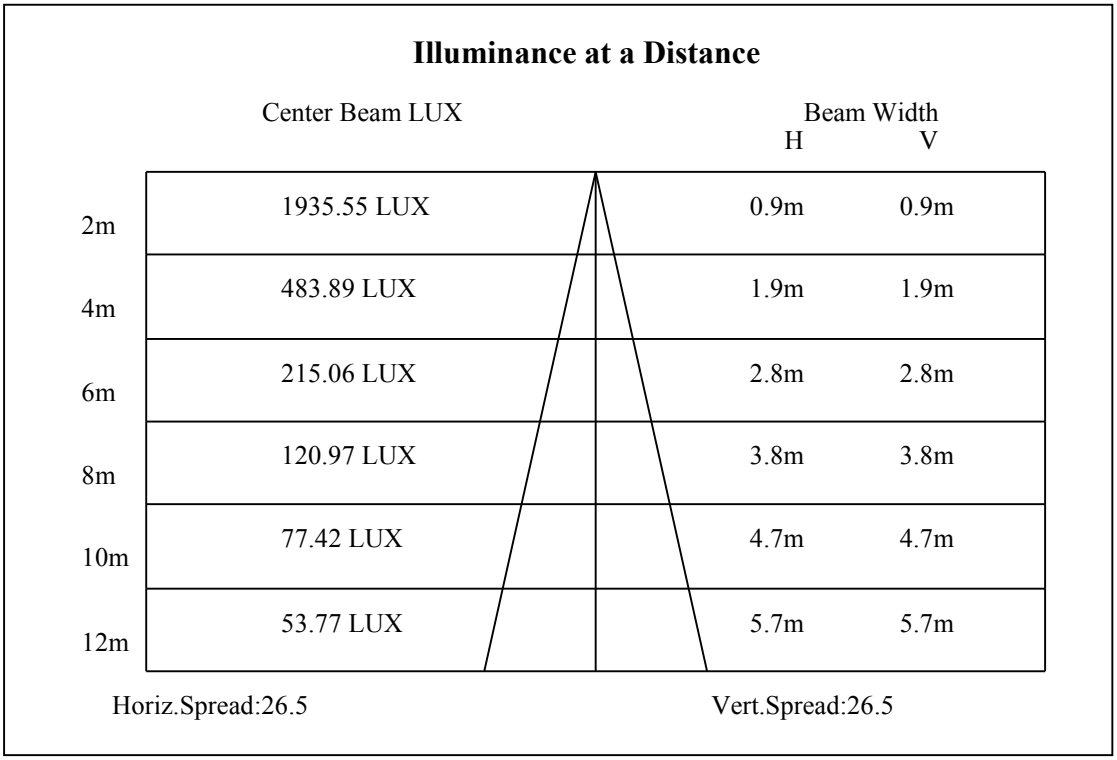
Beam Angle(50%Imax):C0/180Left:13.2 Right:13.2
:C90/270Left:13.2 Right:13.2

Equipment: GMS 1800
Temperature(°C): 25.0

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

Operator: NT
Distance(m): 7.25

Lux distance Curve

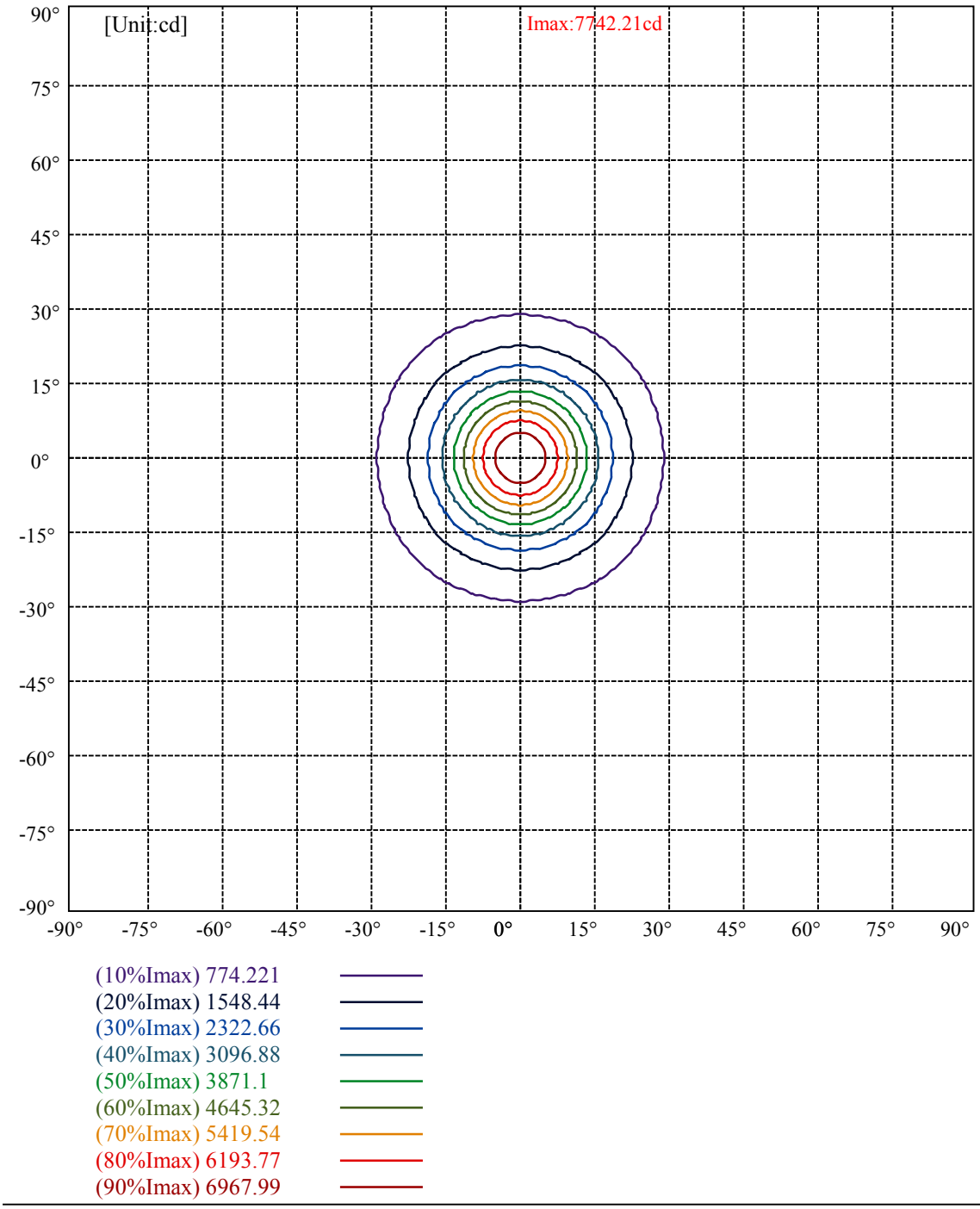


Equipment: GMS 1800
Temperature(°C): 25.0

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

Operator: NT
Distance(m): 7.25

ISO-Intensity(V-H)

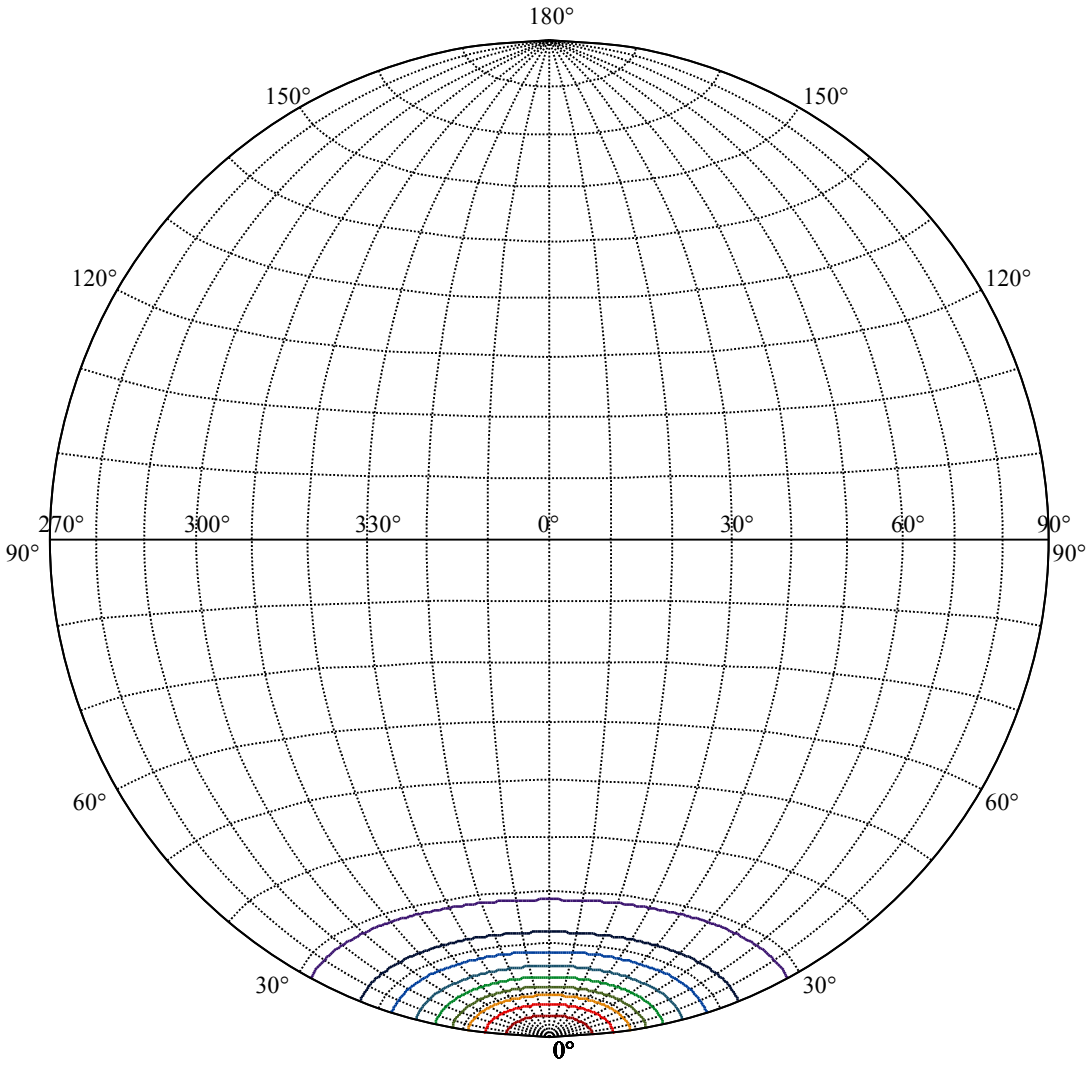


Equipment: GMS 1800
Temperature(°C): 25.0

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

Operator: NT
Distance(m): 7.25

ISO candela diagram on circular web



House [Unit:cd] Road

Imax:7742.21

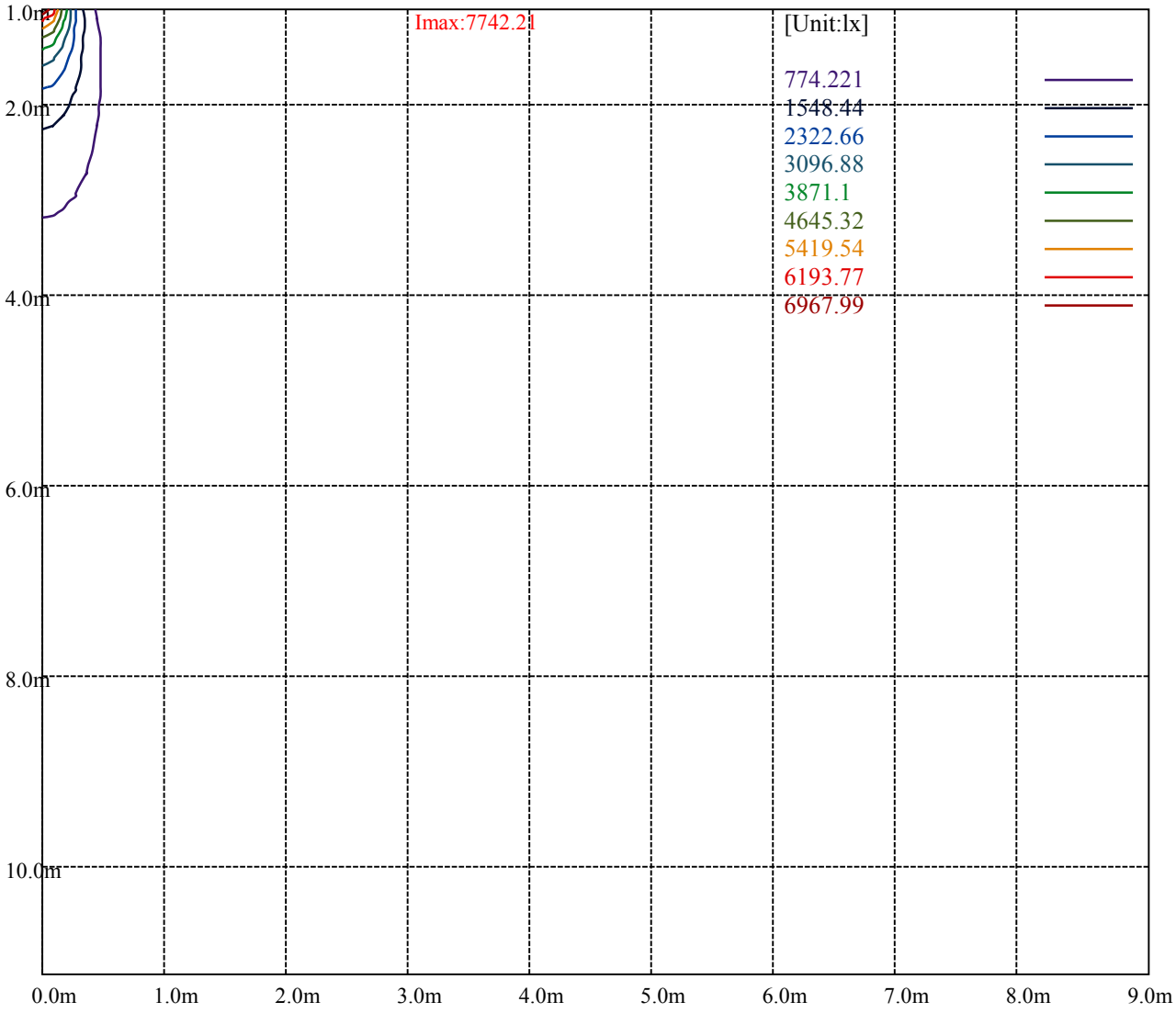
(10%Imax) 774.221
(20%Imax) 1548.44
(30%Imax) 2322.66
(40%Imax) 3096.88
(50%Imax) 3871.1
(60%Imax) 4645.32
(70%Imax) 5419.54
(80%Imax) 6193.77
(90%Imax) 6967.99

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 2-2519-L

Luminance Limitting Curve(no luminous side)

Luminance Table

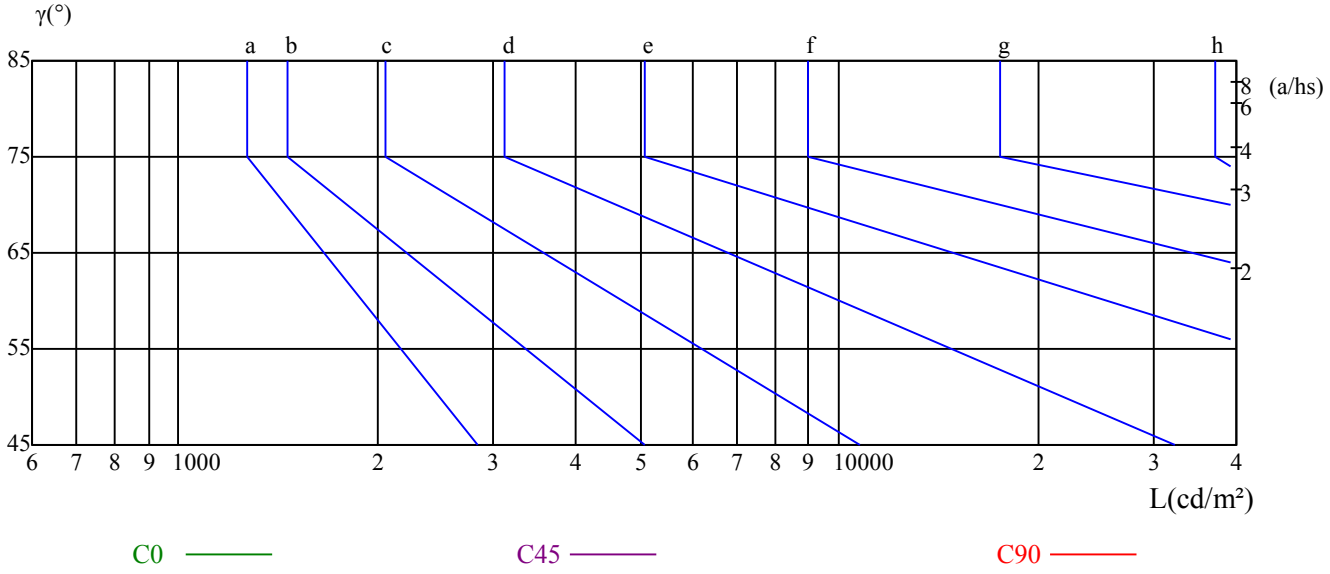
γ	45	50	55	60	65	70	75	80	85
C0	0	0	0	0	0	0	0	0	0
C45	0	0	0	0	0	0	0	0	0
C90	0	0	0	0	0	0	0	0	0

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

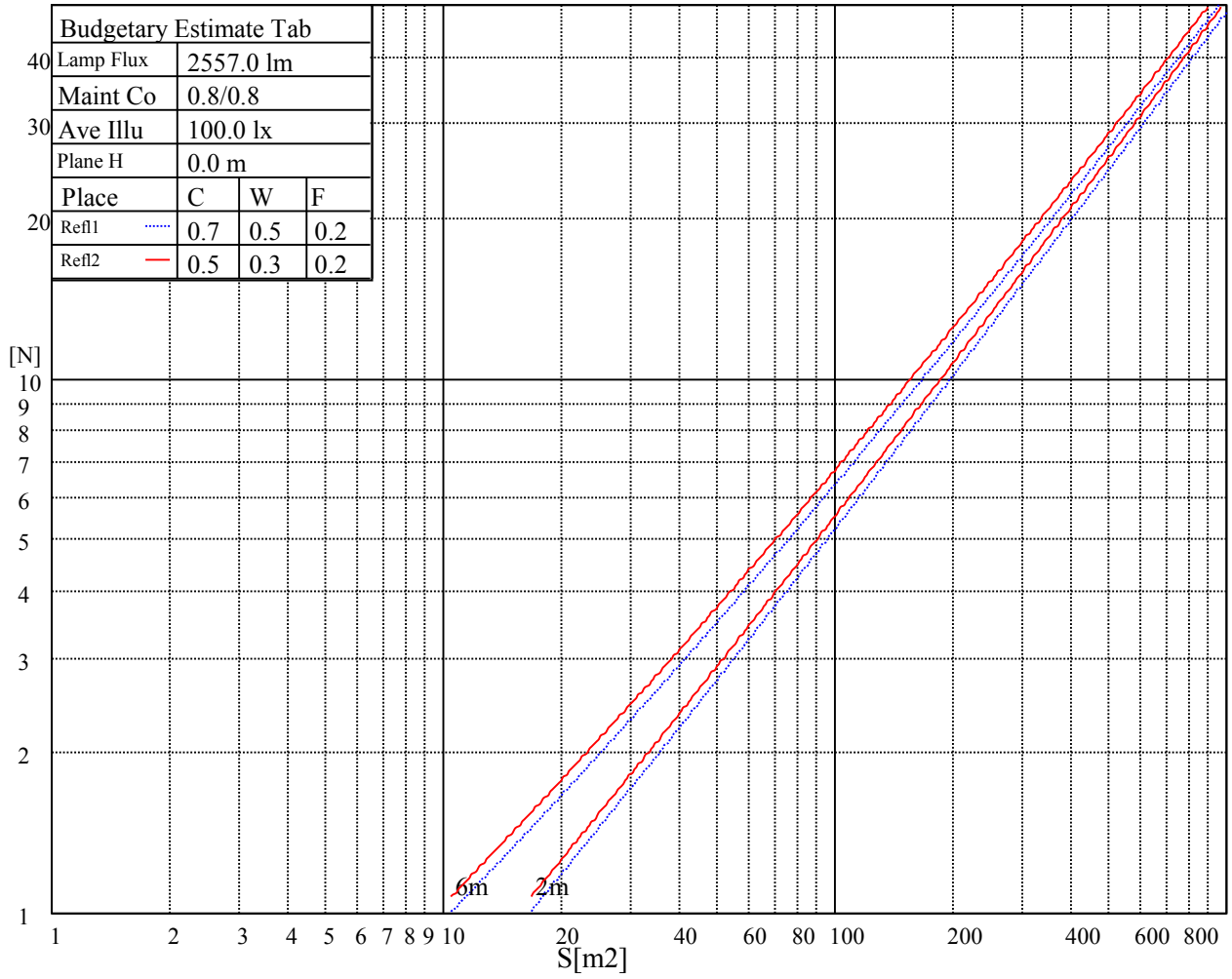
Date: 2024/9/6
Humidity(%): 60.0%

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

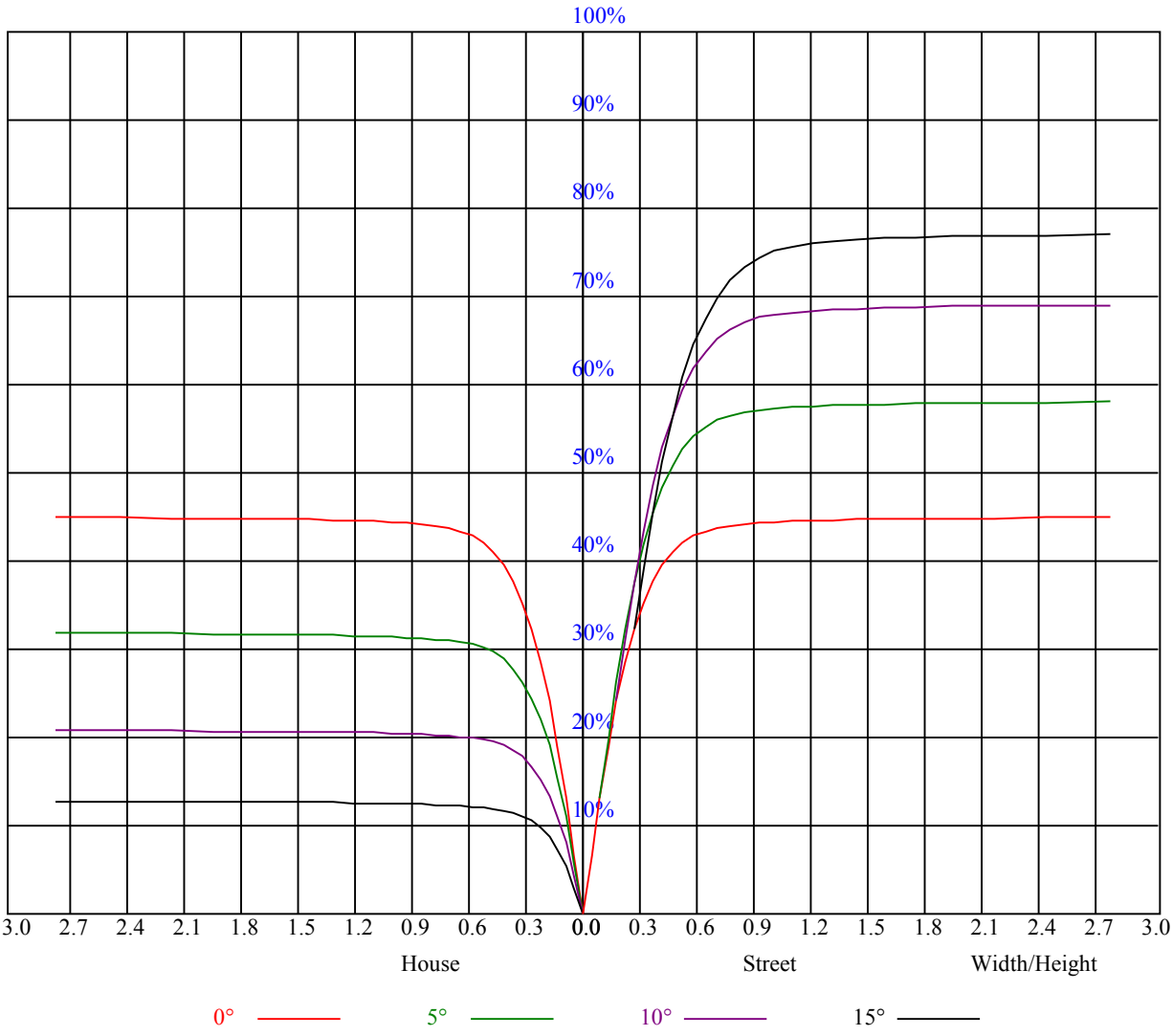
Date: 2024/9/6
Humidity(%): 60.0%

Operator: NT
Distance(m): 7.25

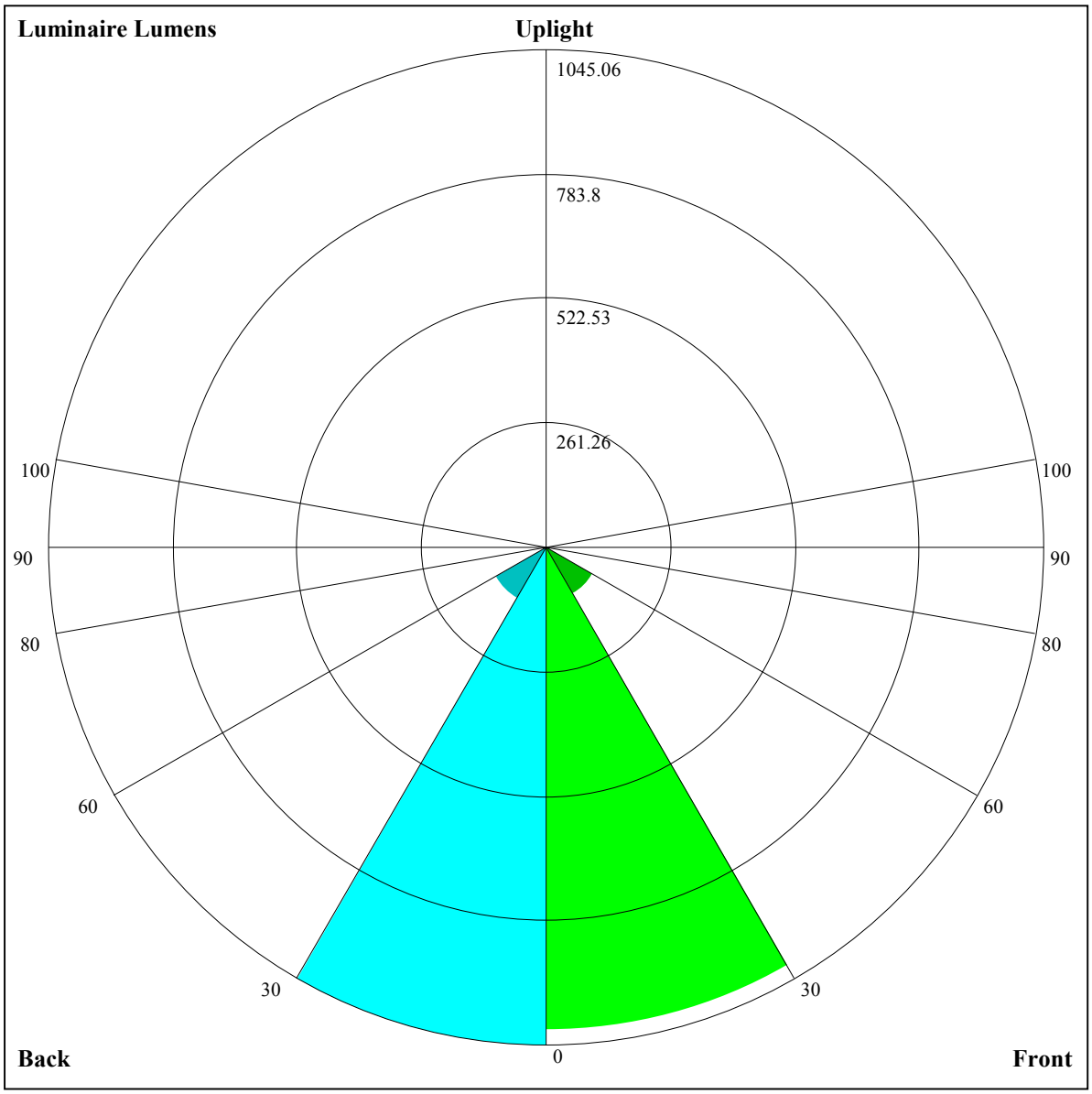
Utilization factor table for indoor luminaire

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	1.07	1.07	1.07	1.05	1.05	1.05	1.00	1.00	1.00	0.96	0.96	0.96	0.92	0.92	0.92	0.90
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	0.88	0.86
2	0.95	0.92	0.90	0.94	0.91	0.89	0.91	0.89	0.87	0.88	0.87	0.85	0.86	0.85	0.83	0.82
3	0.91	0.87	0.84	0.89	0.86	0.83	0.87	0.84	0.82	0.85	0.83	0.81	0.83	0.81	0.80	0.78
4	0.86	0.82	0.79	0.85	0.82	0.79	0.83	0.80	0.78	0.82	0.79	0.77	0.80	0.78	0.76	0.75
5	0.82	0.78	0.75	0.82	0.78	0.75	0.80	0.77	0.74	0.79	0.76	0.73	0.77	0.75	0.73	0.72
6	0.79	0.75	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
7	0.76	0.71	0.68	0.75	0.71	0.68	0.74	0.70	0.68	0.73	0.70	0.68	0.72	0.69	0.67	0.66
8	0.73	0.69	0.66	0.72	0.68	0.65	0.71	0.68	0.65	0.71	0.67	0.65	0.70	0.67	0.65	0.64
9	0.70	0.66	0.63	0.70	0.66	0.63	0.69	0.65	0.63	0.68	0.65	0.63	0.68	0.65	0.62	0.61
10	0.68	0.64	0.61	0.67	0.63	0.61	0.67	0.63	0.61	0.66	0.63	0.60	0.65	0.62	0.60	0.59

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=1014.27,FM=112.89,FH=9.54,FVH=1.21
BL=1045.06,BM=122.1,BH=9.86,BVH=1.23
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	7727.58	7617.83	7453.47	7232.81	7071.81	6637.75	6431.07	6053.89	5642.69
45.0	7794.44	7725.90	7567.69	7371.58	7105.24	6791.55	6445.00	6047.74	5614.25
90.0	7649.00	7447.90	7182.67	6865.08	6500.72	6103.45	5669.97	5312.28	4881.06
135.0	7797.80	7753.76	7603.32	7303.03	7138.09	6806.06	6452.78	6066.66	5650.47
180.0	7727.58	7768.84	7746.56	7656.83	7510.87	7280.17	7006.06	6688.47	6340.25
225.0	7794.44	7805.01	7752.08	7622.82	7527.00	7224.45	7066.77	6757.54	6272.81
270.0	7649.00	7782.77	7832.34	7837.33	7782.77	7659.04	7481.90	7260.14	6985.45
315.0	7797.80	7818.93	7793.34	7704.19	7537.04	7336.99	7077.91	6773.73	6433.28
360.0	7727.58	7617.83	7453.47	7232.81	7071.81	6637.75	6431.07	6053.89	5642.69

C/γ(°)	9.0	10.0	11.0	12.0	13.0	14.0	15.0	16.0	17.0
0.0	5199.17	4740.61	4315.54	3909.91	3525.47	3193.38	2884.16	2602.79	2359.32
45.0	5162.43	4719.48	4291.57	3886.52	3659.19	3173.88	2875.80	2708.13	2353.75
90.0	4443.69	4031.91	3658.61	3314.85	3010.10	2726.47	2474.12	2250.67	2036.74
135.0	5195.86	4760.11	4335.04	3932.20	3570.57	3230.18	2925.42	2649.62	2403.89
180.0	5945.76	5527.37	5084.42	4649.26	4229.18	3818.51	3454.14	3189.49	2827.34
225.0	6041.59	5621.51	5174.67	4724.48	4293.25	3886.52	3508.18	3157.17	2837.90
270.0	6670.08	6275.59	5883.95	5473.28	5041.48	4608.57	4350.60	3765.58	3388.39
315.0	6044.95	5639.90	5200.85	4755.70	4321.11	3911.02	3529.94	3178.93	2855.77
360.0	5199.17	4740.61	4315.54	3909.91	3525.47	3193.38	2884.16	2602.79	2359.32

C/γ(°)	18.0	19.0	20.0	21.0	22.0	23.0	24.0	25.0	26.0
0.0	2137.03	1924.16	1742.55	1564.79	1404.89	1227.18	1067.12	1067.12	948.07
45.0	2217.24	2002.74	1809.41	1628.33	1461.18	1315.22	1190.38	1079.53	966.99
90.0	1844.52	1664.55	1499.08	1355.32	1081.53	1081.53	1058.35	942.08	779.87
135.0	2176.03	1966.52	1817.19	1609.36	1448.94	1338.61	1221.61	1108.49	989.80
180.0	2558.22	2362.11	2134.77	1935.30	1742.55	1576.51	1416.61	1288.46	1169.20
225.0	2553.75	2301.92	2071.28	1861.24	1671.22	1529.15	1336.35	1068.75	1068.75
270.0	3185.60	2864.13	2577.72	2326.47	2096.88	1896.88	1708.54	1527.47	1365.89
315.0	2581.08	2327.57	2094.09	1966.52	1777.09	1589.33	1421.08	1230.49	1068.49
360.0	2137.03	1924.16	1742.55	1564.79	1404.89	1227.18	1067.12	1067.12	948.07

C/γ(°)	27.0	28.0	29.0	30.0	31.0	32.0	33.0	34.0	35.0
0.0	831.91	720.42	614.30	510.80	414.77	327.88	251.56	189.91	149.01
45.0	850.51	739.08	630.43	529.04	435.43	348.54	284.47	284.47	153.48
90.0	711.12	601.74	499.97	405.41	320.05	245.26	186.86	150.75	131.41
135.0	866.70	753.59	646.05	545.18	449.36	363.00	280.53	280.53	158.69
180.0	1054.46	935.77	818.77	711.22	606.47	506.76	412.62	327.88	312.33
225.0	999.16	878.74	766.20	660.19	563.63	471.33	384.92	302.44	232.48
270.0	1235.53	1116.85	998.74	877.85	764.73	653.30	549.12	451.04	359.69
315.0	1019.77	899.03	782.24	677.27	574.51	475.90	388.54	304.65	229.07
360.0	831.91	720.42	614.30	510.80	414.77	327.88	251.56	189.91	149.01

C/γ(°)	36.0	37.0	38.0	39.0	40.0	41.0	42.0	43.0	44.0
0.0	127.41	113.43	100.97	90.04	80.42	72.01	67.33	60.45	52.35
45.0	139.76	123.99	110.96	99.55	89.09	79.68	71.22	63.76	57.56
90.0	117.69	106.23	96.14	87.04	78.84	71.43	64.97	60.34	54.19
135.0	130.62	120.68	106.23	94.72	84.99	76.48	68.86	62.23	56.56
180.0	312.33	162.21	134.56	118.06	103.55	92.19	82.47	73.64	65.81
225.0	178.24	146.18	127.36	112.48	104.49	88.36	82.37	73.38	62.39
270.0	309.54	309.54	165.89	134.51	117.69	104.44	92.98	82.52	73.59
315.0	191.49	135.19	117.37	109.44	92.72	86.31	76.90	68.59	61.24
360.0	127.41	113.43	100.97	90.04	80.42	72.01	67.33	60.45	52.35

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	49.25	44.52	40.42	37.11	34.06	31.27	29.07	27.12	25.39
45.0	51.98	46.83	42.84	39.58	36.16	33.11	30.80	28.65	26.75
90.0	50.51	46.52	42.89	39.63	36.90	34.53	32.17	30.33	28.70
135.0	51.72	47.25	43.36	40.11	37.11	34.48	32.17	30.17	28.38
180.0	58.92	53.09	47.78	43.10	39.16	35.69	32.69	30.12	28.07
225.0	58.45	52.30	46.83	42.21	38.16	34.74	31.70	29.17	27.17
270.0	65.28	58.34	52.09	46.73	41.94	38.00	34.59	31.59	28.91
315.0	54.82	49.25	44.26	40.05	36.37	33.27	30.54	28.12	26.28
360.0	49.25	44.52	40.42	37.11	34.06	31.27	29.07	27.12	25.39

C/γ(°)	54.0	55.0	56.0	57.0	58.0	59.0	60.0	61.0	62.0
0.0	23.97	22.65	21.39	20.29	19.08	17.77	16.61	15.40	14.30
45.0	25.76	23.97	22.55	21.45	19.92	18.61	17.08	15.82	14.61
90.0	26.91	25.44	23.86	22.18	20.66	19.24	17.71	16.24	15.09
135.0	26.91	25.49	24.49	22.97	21.71	20.60	18.98	17.98	16.71
180.0	26.12	24.81	23.23	22.18	20.97	19.97	18.82	17.61	16.45
225.0	25.12	23.50	22.34	20.97	19.76	18.82	17.77	16.82	15.45
270.0	27.54	25.02	23.34	22.50	21.45	20.39	19.40	18.61	17.66
315.0	24.55	22.97	21.87	21.24	19.76	19.19	18.29	16.87	16.24
360.0	23.97	22.65	21.39	20.29	19.08	17.77	16.61	15.40	14.30

C/γ(°)	63.0	64.0	65.0	66.0	67.0	68.0	69.0	70.0	71.0
0.0	13.25	12.67	11.51	11.04	10.30	9.67	8.99	8.41	7.73
45.0	13.61	12.67	11.77	10.99	10.25	9.57	8.83	8.25	7.67
90.0	13.93	13.14	11.62	10.72	10.14	9.25	8.46	7.67	6.94
135.0	15.45	14.40	13.30	12.25	11.30	10.46	9.62	8.78	8.04
180.0	15.51	14.40	13.35	12.56	11.77	10.88	10.14	9.41	8.83
225.0	14.51	13.67	12.72	11.93	11.09	10.35	9.67	8.99	8.46
270.0	16.61	15.61	14.56	13.51	12.51	11.72	10.99	10.20	9.57
315.0	15.35	14.24	13.25	12.46	11.67	10.83	10.20	9.62	8.94
360.0	13.25	12.67	11.51	11.04	10.30	9.67	8.99	8.41	7.73

C/γ(°)	72.0	73.0	74.0	75.0	76.0	77.0	78.0	79.0	80.0
0.0	7.15	6.62	6.04	5.57	5.05	4.73	4.26	3.84	3.42
45.0	6.99	6.57	5.94	5.47	5.10	4.57	4.21	3.84	3.47
90.0	6.25	5.73	5.10	4.63	4.21	3.84	3.47	3.10	2.79
135.0	7.41	6.68	5.99	5.41	4.89	4.52	4.05	3.68	3.47
180.0	8.20	7.57	6.99	6.47	6.04	5.31	4.84	4.63	4.05
225.0	7.88	7.25	6.68	6.15	5.68	5.26	4.78	4.36	3.99
270.0	8.99	8.41	7.78	7.41	6.57	5.99	5.68	4.99	4.73
315.0	8.25	7.62	6.99	6.41	5.78	5.26	4.89	4.36	3.99
360.0	7.15	6.62	6.04	5.57	5.05	4.73	4.26	3.84	3.42

C/γ(°)	81.0	82.0	83.0	84.0	85.0	86.0	87.0	88.0	89.0
0.0	3.15	2.89	2.47	2.16	2.00	1.73	1.52	1.31	1.05
45.0	3.05	2.68	2.37	2.05	1.79	1.52	1.31	1.10	1.00
90.0	2.47	2.26	1.94	1.79	1.52	1.31	1.05	1.00	1.00
135.0	3.00	2.68	2.37	2.21	1.84	1.73	1.47	1.21	0.95
180.0	3.78	3.26	3.00	2.68	2.31	2.10	1.79	1.47	1.26
225.0	3.68	3.26	3.00	2.63	2.21	2.05	1.73	1.47	1.26
270.0	4.26	3.78	3.47	3.05	2.68	2.42	2.16	1.94	1.68
315.0	3.68	3.42	3.05	2.84	2.52	2.21	2.00	1.73	1.52
360.0	3.15	2.89	2.47	2.16	2.00	1.73	1.52	1.31	1.05

Intensity data(cd)

C/γ(°)	90.0
0.0	1.10
45.0	1.05
90.0	1.05
135.0	0.95
180.0	1.10
225.0	1.10
270.0	1.42
315.0	1.42
360.0	1.10