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: 2-2683-L
Luminaire: 92.70.411.00
Report No: 2024416-B012
Ballast type: AC

Test No: 2024416-C012	Voltage(V): 33.780
LampCAT: NICHIA NFCWJ108B-V3	Current(A): 0.577
Lamp flux(lm): 2647.0	Power (W): 19.491
Number of Lamps: 1	PF: 0.000
Length(mm): 0	Width(mm): 0
Phm Type: C	Height(mm): 0

Photometric Results

Lumens(lm): 2270.64, Efficiency(%): 85.78% , Luminous Efficacy(lm/W): 116.50
Central intensity(cd): 7824.957, Maximum intensity(cd): 7824.957
Angle of maximum intensity: C=0.0 γ=0.0
Beam Angle(50%Imax): [C0/180]Total=24.4
[C90/270]Total=24.4
Field angle(10%Imax): [C0/180]Total=59.4
[C90/270]Total=59.4
Maximum s/h(1/2): C0_180=0.41 C90_270=0.41
Maximum s/h(1/4): C0_180=0.44 C90_270=0.44
Up flux rate of lamp(%): 0.00%
Down flux rate of lamp(%): 85.78%
Up flux rate of LUM(%): - -
Down flux rate of LUM(%): 100.00%
CIE Type : Direct lighting
Output flux ratio in π solid angle : 97.994%

Equipment: GMS1980	Date: 2024/4/16	Operator: NT07
Temperature(°C): 25.0	Humidity(%): 60.0%	Distance(m): 7.65

Zonal flux distribution table

γ(°)	Average I(cd)	Zonal F(lm)	Sum F(lm)	Eff Flux(%)	Eff Sum(%)
0.0	7824.956	0.000	0	0.00%	0.00%
1.0	7790.427	7.472	7.472	0.28%	0.33%
2.0	7683.185	22.209	29.681	0.84%	1.31%
3.0	7512.007	36.342	66.023	1.37%	2.91%
4.0	7262.701	49.456	115.478	1.87%	5.09%
5.0	6975.136	61.250	176.729	2.31%	7.78%
6.0	6607.249	71.379	248.108	2.70%	10.93%
7.0	6198.762	79.487	327.595	3.00%	14.43%
8.0	5758.380	85.575	413.17	3.23%	18.20%
9.0	5302.197	89.640	502.81	3.39%	22.14%
10.0	4853.329	91.904	594.713	3.47%	26.19%
11.0	4418.873	92.648	687.362	3.50%	30.27%
12.0	4004.241	92.077	779.438	3.48%	34.33%
13.0	3607.020	90.326	869.765	3.41%	38.30%
14.0	3253.910	87.819	957.584	3.32%	42.17%
15.0	2931.377	84.914	1042.499	3.21%	45.91%
16.0	2630.425	81.496	1123.995	3.08%	49.50%
17.0	2361.588	77.739	1201.734	2.94%	52.92%
18.0	2120.182	73.895	1275.628	2.79%	56.18%
19.0	1922.815	70.340	1345.968	2.66%	59.28%
20.0	1727.350	66.808	1412.776	2.52%	62.22%
21.0	1571.168	63.338	1476.115	2.39%	65.01%
22.0	1413.962	59.987	1536.102	2.27%	67.65%
23.0	1272.777	56.375	1592.477	2.13%	70.13%
24.0	1217.619	54.449	1646.926	2.06%	72.53%
25.0	1132.835	53.444	1700.37	2.02%	74.89%
26.0	1055.285	51.651	1752.021	1.95%	77.16%
27.0	986.850	49.961	1801.982	1.89%	79.36%
28.0	920.318	48.285	1850.268	1.82%	81.49%
29.0	843.499	46.146	1896.414	1.74%	83.52%
30.0	754.523	43.146	1939.561	1.63%	85.42%
31.0	659.080	39.339	1978.899	1.49%	87.15%
32.0	571.728	35.261	2014.16	1.33%	88.70%
33.0	481.574	31.031	2045.191	1.17%	90.07%
34.0	391.377	26.418	2071.609	1.00%	91.23%
35.0	310.316	21.792	2093.401	0.82%	92.19%
36.0	254.975	17.999	2111.4	0.68%	92.99%
37.0	227.499	15.736	2127.136	0.59%	93.68%

Zonal flux distribution table

γ(°)	Average I(cd)	Zonal F(lm)	Sum F(lm)	Eff Flux(%)	Eff Sum(%)
38.0	124.646	11.754	2138.89	0.44%	94.20%
39.0	89.693	7.316	2146.206	0.28%	94.52%
40.0	70.681	5.593	2151.799	0.21%	94.77%
41.0	63.329	4.772	2156.571	0.18%	94.98%
42.0	58.910	4.441	2161.012	0.17%	95.17%
43.0	55.084	4.223	2165.235	0.16%	95.36%
44.0	52.100	4.045	2169.28	0.15%	95.54%
45.0	49.861	3.918	2173.199	0.15%	95.71%
46.0	48.164	3.834	2177.032	0.14%	95.88%
47.0	46.591	3.769	2180.801	0.14%	96.04%
48.0	45.523	3.724	2184.525	0.14%	96.21%
49.0	44.367	3.691	2188.216	0.14%	96.37%
50.0	43.343	3.657	2191.873	0.14%	96.53%
51.0	42.414	3.628	2195.501	0.14%	96.69%
52.0	41.412	3.597	2199.098	0.14%	96.85%
53.0	40.307	3.555	2202.653	0.13%	97.01%
54.0	39.195	3.504	2206.157	0.13%	97.16%
55.0	37.849	3.439	2209.596	0.13%	97.31%
56.0	36.394	3.355	2212.951	0.13%	97.46%
57.0	34.704	3.251	2216.202	0.12%	97.60%
58.0	32.751	3.119	2219.321	0.12%	97.74%
59.0	30.724	2.967	2222.289	0.11%	97.87%
60.0	28.471	2.797	2225.085	0.11%	97.99%
61.0	26.350	2.616	2227.702	0.10%	98.11%
62.0	24.484	2.449	2230.151	0.09%	98.22%
63.0	22.860	2.303	2232.454	0.09%	98.32%
64.0	21.331	2.168	2234.622	0.08%	98.41%
65.0	19.985	2.045	2236.667	0.08%	98.50%
66.0	18.713	1.931	2238.598	0.07%	98.59%
67.0	17.535	1.823	2240.42	0.07%	98.67%
68.0	16.525	1.725	2242.146	0.07%	98.75%
69.0	15.764	1.647	2243.793	0.06%	98.82%
70.0	15.070	1.584	2245.377	0.06%	98.89%
71.0	14.550	1.531	2246.907	0.06%	98.95%
72.0	14.133	1.491	2248.399	0.06%	99.02%
73.0	13.753	1.458	2249.857	0.06%	99.08%
74.0	13.409	1.428	2251.285	0.05%	99.15%
75.0	13.094	1.400	2252.685	0.05%	99.21%

Zonal flux distribution table

γ(°)	Average I(cd)	Zonal F(lm)	Sum F(lm)	Eff Flux(%)	Eff Sum(%)
76.0	12.794	1.374	2254.06	0.05%	99.27%
77.0	12.473	1.347	2255.407	0.05%	99.33%
78.0	12.209	1.321	2256.728	0.05%	99.39%
79.0	11.887	1.295	2258.023	0.05%	99.44%
80.0	11.587	1.266	2259.288	0.05%	99.50%
81.0	11.309	1.238	2260.527	0.05%	99.55%
82.0	11.046	1.212	2261.739	0.05%	99.61%
83.0	10.775	1.186	2262.925	0.04%	99.66%
84.0	10.549	1.162	2264.087	0.04%	99.71%
85.0	10.366	1.141	2265.228	0.04%	99.76%
86.0	10.154	1.122	2266.35	0.04%	99.81%
87.0	9.934	1.099	2267.449	0.04%	99.86%
88.0	9.737	1.078	2268.527	0.04%	99.91%
89.0	9.620	1.061	2269.588	0.04%	99.95%
90.0	9.568	1.052	2270.64	0.04%	100.00%

Zonal flux distribution table

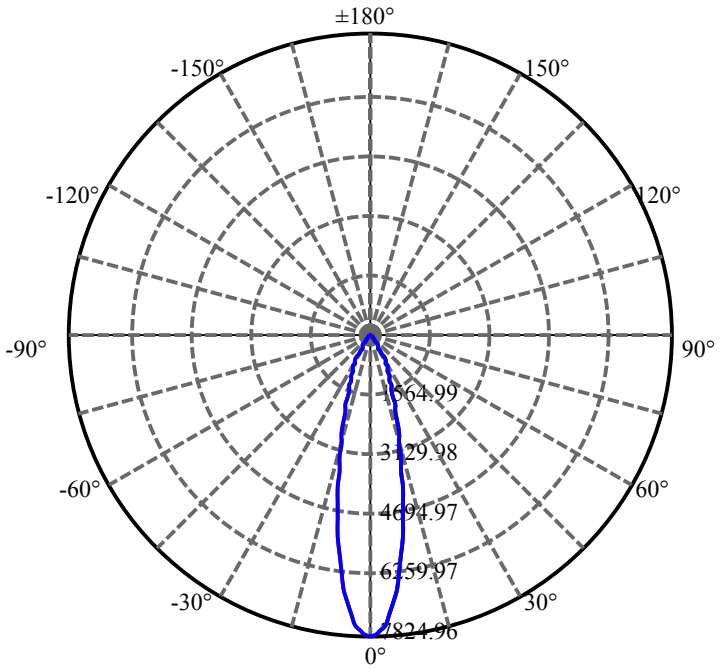
ZONAL LUMEN SUMMARY

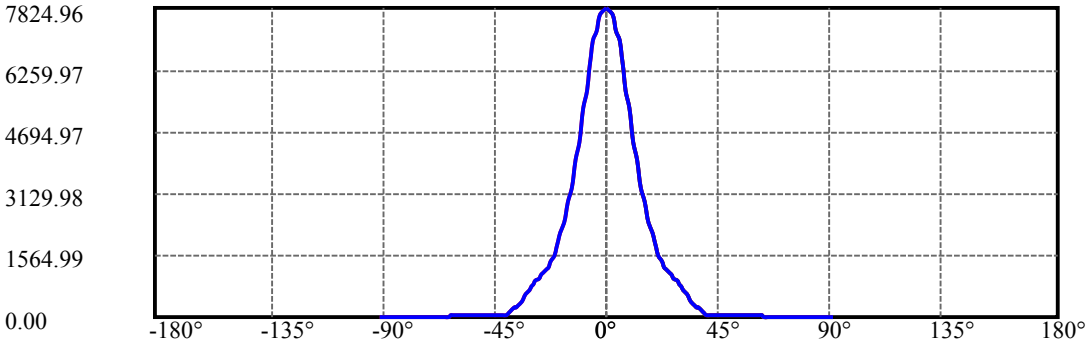
Zone	Lumens	%Lamp	%Fixt
0-30	1939.56	73.27%	85.42%
0-40	2151.80	81.29%	94.77%
0-60	2225.09	84.06%	97.99%
0-90	2269.59	85.74%	99.95%
0-120	2269.59	85.74%	99.95%
0-180	2270.64	85.78%	100.00%
60-90	44.50	1.68%	1.96%
90-120	0.00	0.00%	0.00%
90-130	0.00	0.00%	0.00%
90-150	0.00	0.00%	0.00%
90-180	0.00	0.00%	0.00%
0-27.30	1816.51	68.63%	80.00%

ZONAL LUMEN SUMMARY

0-10	594.71
10-20	818.06
20-30	526.78
30-40	212.24
40-50	40.07
50-60	33.21
60-70	20.29
70-80	13.91
80-90	10.30
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:

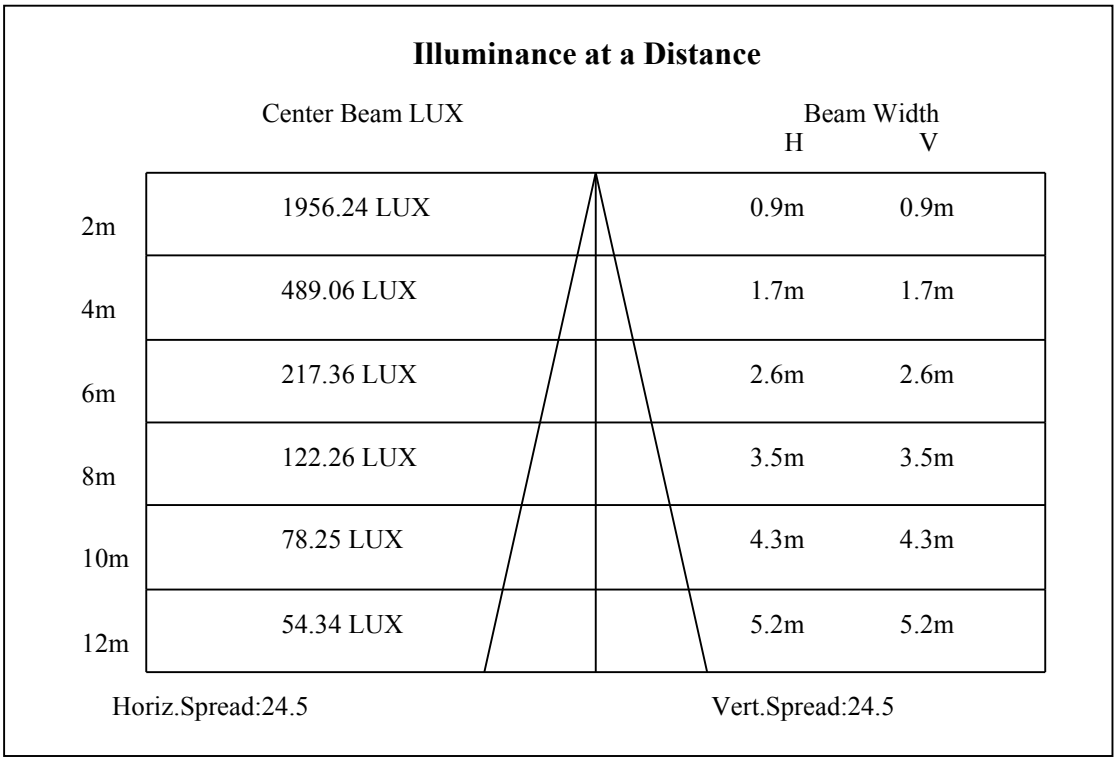
C90/C270:

Field angle(10%Imax):C0/180Left:29.7 Right:29.7
:C90/270Left:29.7 Right:29.7

Beam Angle(50%Imax):C0/180Left:12.2 Right:12.2
:C90/270Left:12.2 Right:12.2

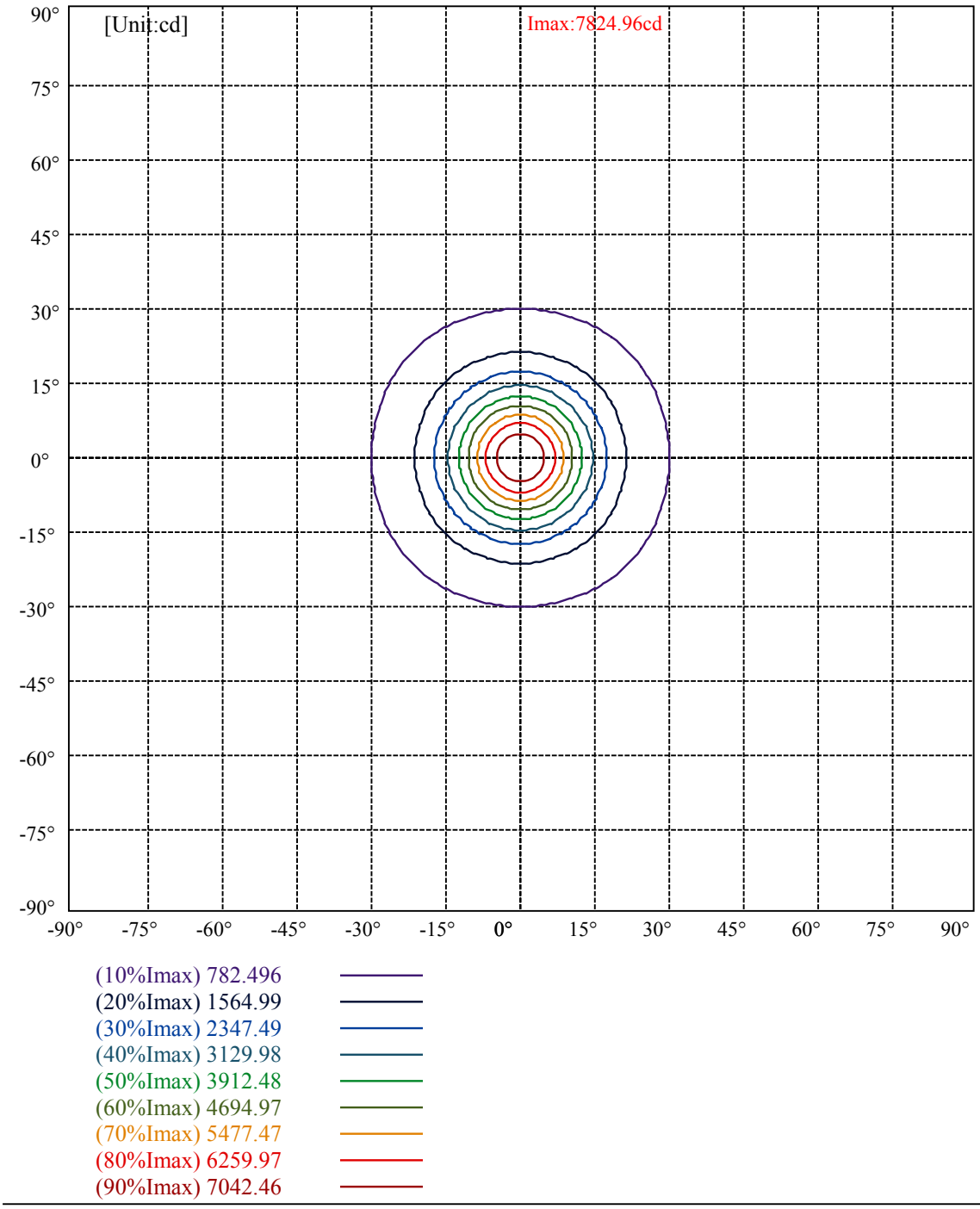
Equipment: GMS1980	Date: 2024/4/16	Operator: NT07
Temperature(°C): 25.0	Humidity(%): 60.0%	Distance(m): 7.65

Lux distance Curve



Equipment: GMS1980 Date: 2024/4/16 Operator: NT07
Temperature(°C): 25.0 Humidity(%): 60.0% Distance(m): 7.65

ISO-Intensity(V-H)

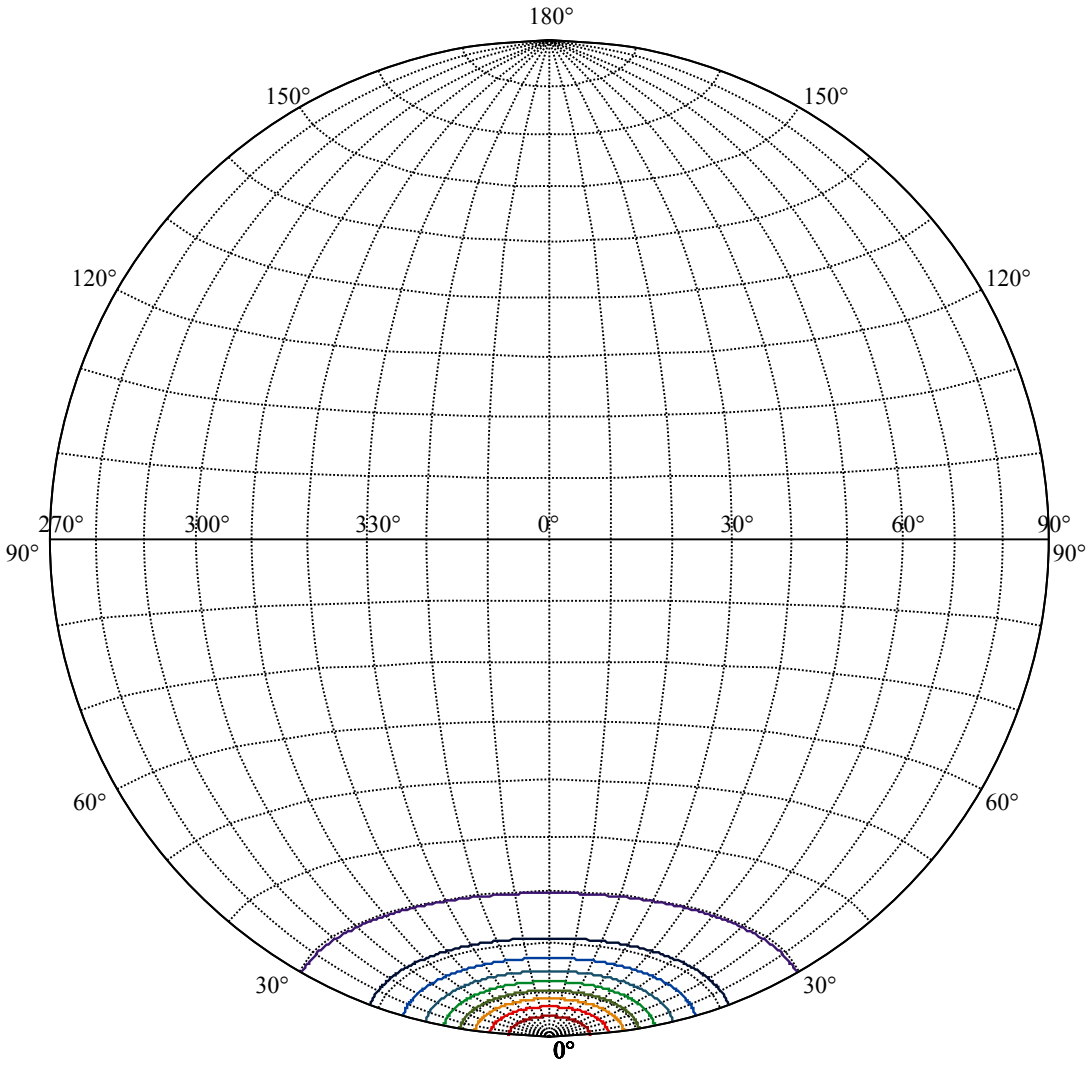


Equipment: GMS1980
Temperature(°C): 25.0

Date: 2024/4/16
Humidity(%): 60.0%

Operator: NT07
Distance(m): 7.65

ISO candela diagram on circular web



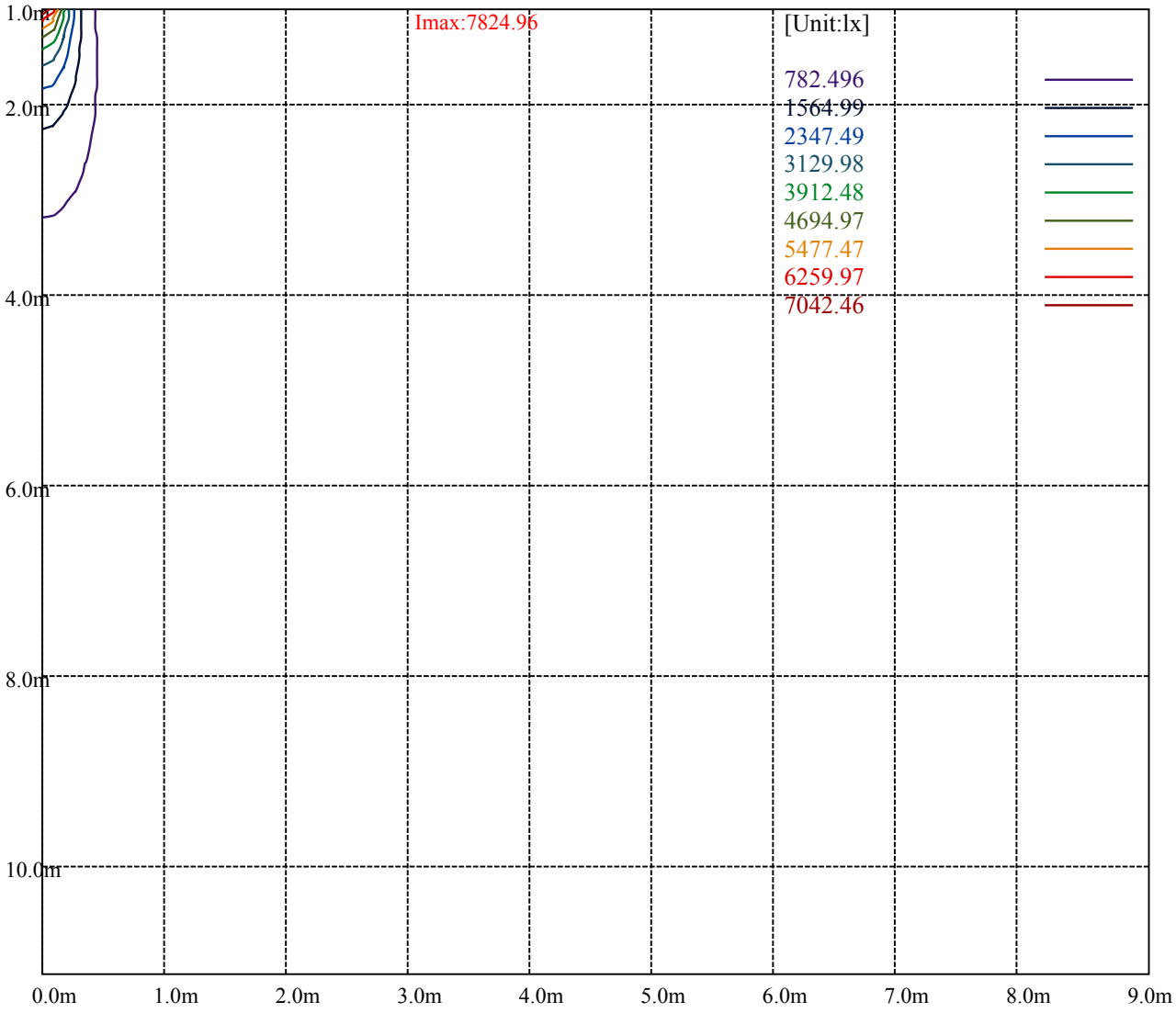
House [Unit:cd] Road

Imax:7824.96

(10%Imax) 782.496
(20%Imax) 1564.99
(30%Imax) 2347.49
(40%Imax) 3129.98
(50%Imax) 3912.48
(60%Imax) 4694.97
(70%Imax) 5477.47
(80%Imax) 6259.97
(90%Imax) 7042.46

Equipment: GMS1980 Date: 2024/4/16 Operator: NT07
Temperature(°C): 25.0 Humidity(%): 60.0% Distance(m): 7.65

Space ISO Lux diagram



Equipment: GMS1980
Temperature(°C): 25.0

Date: 2024/4/16
Humidity(%): 60.0%

Operator: NT07
Distance(m): 7.65

NT 2-2683-L

Luminance Limitting Curve(no luminous side)

Luminance Table

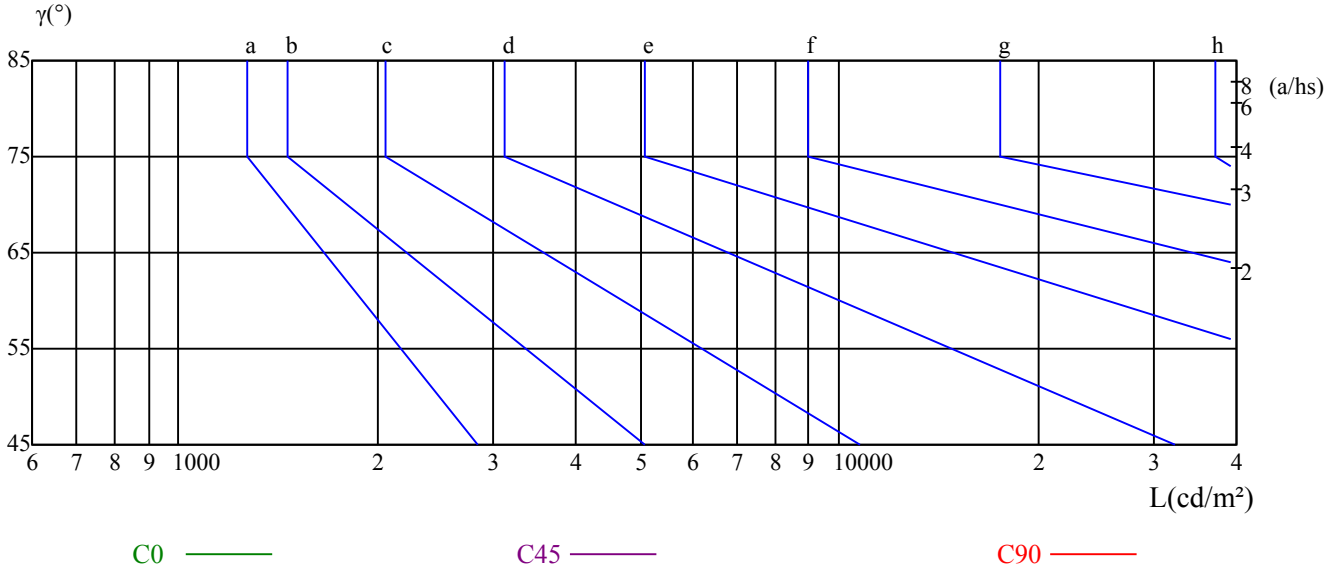
γ	45	50	55	60	65	70	75	80	85
C0	0	0	0	0	0	0	0	0	0
C45	0	0	0	0	0	0	0	0	0
C90	0	0	0	0	0	0	0	0	0

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: GMS1980
Temperature(°C): 25.0

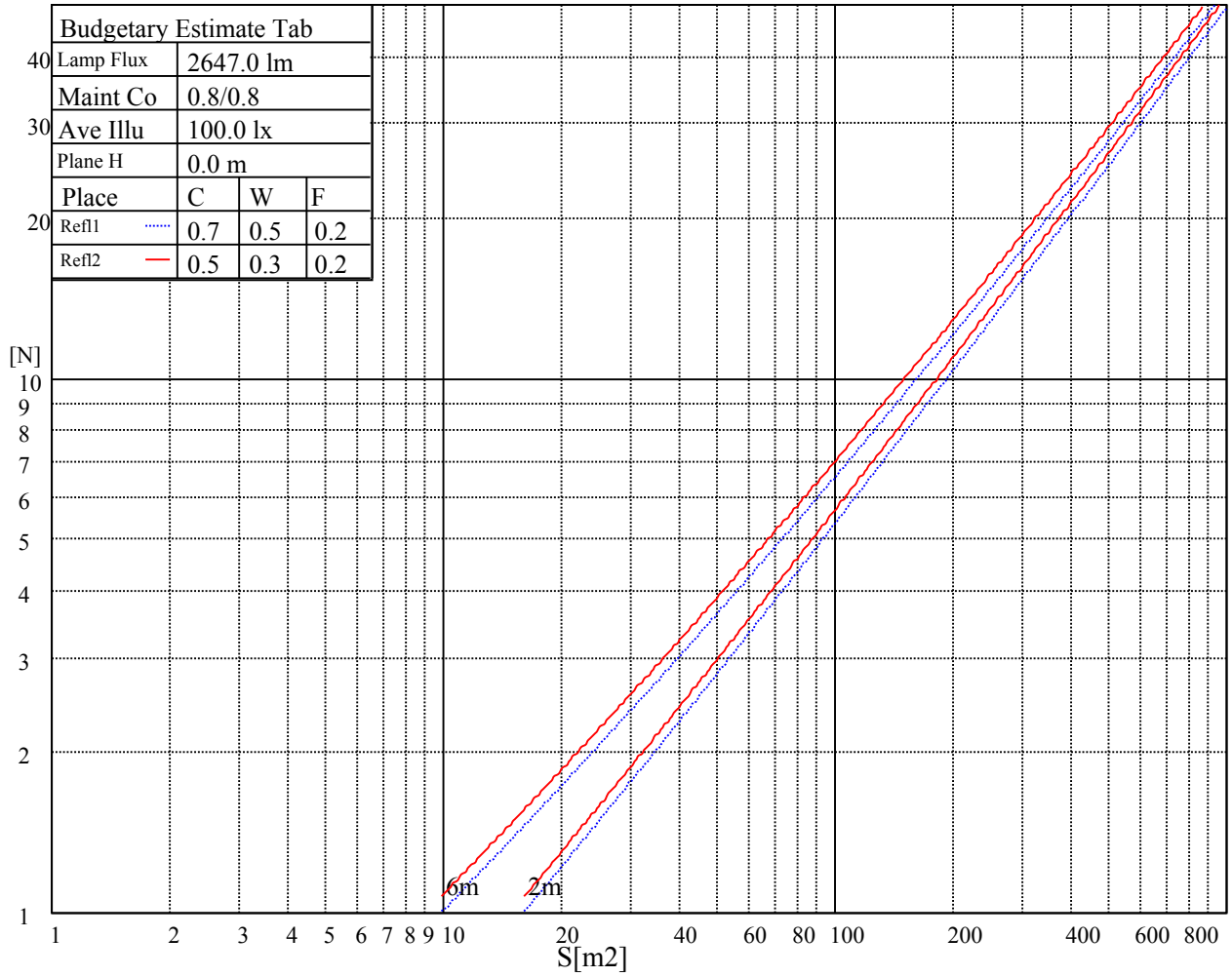
Date: 2024/4/16
Humidity(%): 60.0%

Operator: NT07
Distance(m): 7.65

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

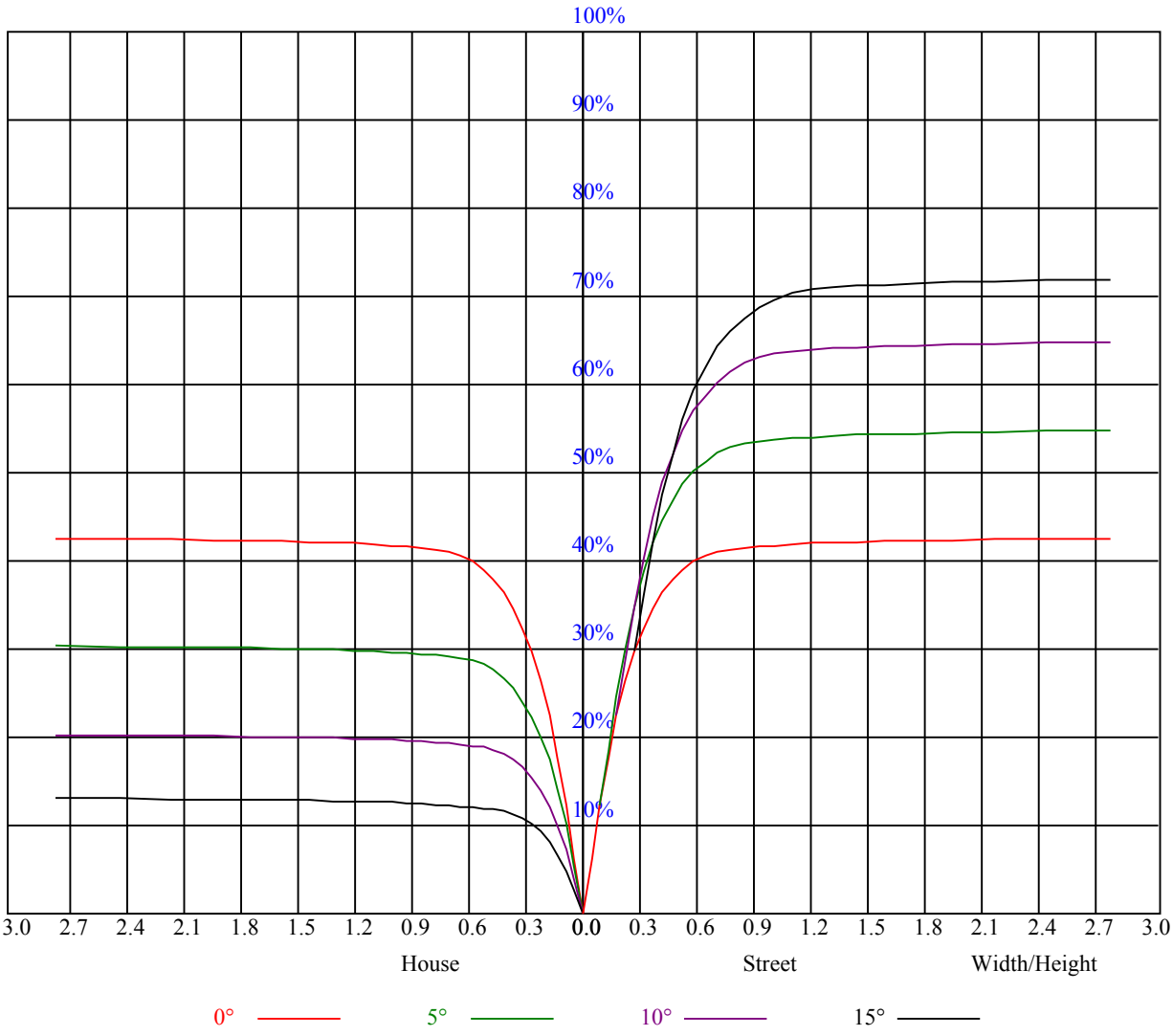


Equipment: GMS1980 Date: 2024/4/16 Operator: NT07
Temperature(°C): 25.0 Humidity(%): 60.0% Distance(m): 7.65

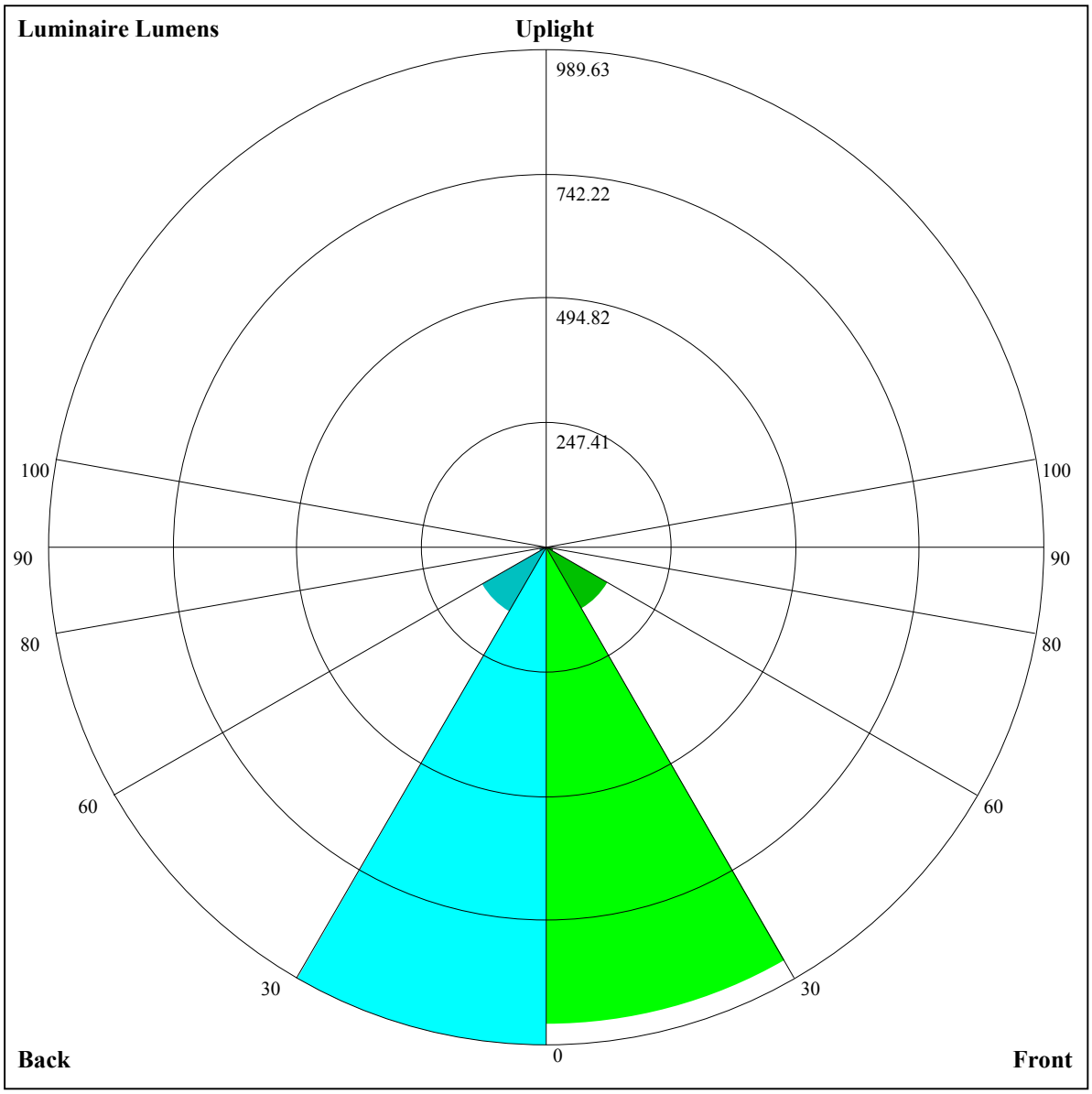
Utilization factor table for indoor luminaire

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	1.02	1.02	1.02	1.00	1.00	1.00	0.95	0.95	0.95	0.91	0.91	0.91	0.88	0.88	0.88	0.86
1	0.96	0.94	0.92	0.94	0.92	0.91	0.90	0.89	0.88	0.87	0.86	0.85	0.84	0.83	0.83	0.81
2	0.90	0.87	0.85	0.89	0.86	0.84	0.86	0.84	0.82	0.83	0.82	0.80	0.81	0.80	0.78	0.77
3	0.85	0.82	0.79	0.84	0.81	0.78	0.82	0.79	0.77	0.80	0.78	0.76	0.78	0.76	0.75	0.73
4	0.81	0.77	0.74	0.80	0.76	0.74	0.78	0.75	0.73	0.77	0.74	0.72	0.75	0.73	0.71	0.70
5	0.77	0.73	0.70	0.77	0.73	0.70	0.75	0.72	0.69	0.74	0.71	0.68	0.72	0.70	0.68	0.67
6	0.74	0.70	0.67	0.73	0.69	0.66	0.72	0.69	0.66	0.71	0.68	0.65	0.70	0.67	0.65	0.64
7	0.71	0.67	0.64	0.70	0.66	0.63	0.69	0.66	0.63	0.68	0.65	0.63	0.67	0.65	0.62	0.61
8	0.68	0.64	0.61	0.68	0.64	0.61	0.67	0.63	0.60	0.66	0.63	0.60	0.65	0.62	0.60	0.59
9	0.65	0.61	0.58	0.65	0.61	0.58	0.64	0.61	0.58	0.64	0.60	0.58	0.63	0.60	0.58	0.57
10	0.63	0.59	0.56	0.63	0.59	0.56	0.62	0.58	0.56	0.61	0.58	0.56	0.61	0.58	0.56	0.55

Coefficient Utilization Curve



Equipment: GMS1980	Date: 2024/4/16	Operator: NT07
Temperature(°C): 25.0	Humidity(%): 60.0%	Distance(m): 7.65



Luminaire Lumens:
FL=948.55,FM=140.62,FH=16.9,FVH=5.66
BL=989.63,BM=147.19,BH=17.37,BVH=5.7
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	7810.47	7706.89	7548.29	7325.32	6976.53	6646.46	6281.28	5880.98	5373.01
45.0	7844.41	7829.78	7747.27	7613.84	7393.21	7058.46	6744.78	6384.86	5894.44
90.0	7844.41	7776.53	7650.70	7463.43	7149.75	6854.80	6416.47	6016.76	5597.15
135.0	7800.52	7847.34	7829.20	7709.23	7555.31	7336.44	7048.51	6641.78	6273.67
180.0	7810.47	7852.61	7817.49	7723.86	7512.59	7277.92	6996.42	6575.06	6188.23
225.0	7844.41	7778.28	7623.78	7425.39	7174.33	6870.60	6415.88	6018.51	5593.64
270.0	7844.41	7827.44	7749.02	7559.41	7354.58	7093.57	6785.16	6317.56	5916.68
315.0	7800.52	7704.55	7499.72	7275.58	6985.30	6662.85	6169.50	5754.58	5230.21
360.0	7810.47	7706.89	7548.29	7325.32	6976.53	6646.46	6281.28	5880.98	5373.01

C/γ(°)	9.0	10.0	11.0	12.0	13.0	14.0	15.0	16.0	17.0
0.0	4963.35	4457.13	4070.88	3695.17	3266.78	2955.44	2678.05	2418.79	2137.89
45.0	5497.66	5099.12	4692.98	4198.46	3823.33	3466.35	3135.11	2774.61	2513.01
90.0	5173.45	4650.84	4252.30	3877.17	3523.70	3198.90	2832.55	2570.95	2275.41
135.0	5769.21	5336.73	4897.22	4382.81	3992.46	3635.48	3291.95	2904.53	2628.30
180.0	5672.64	5220.85	4781.35	4359.40	3869.57	3514.92	3184.27	2881.12	2549.88
225.0	5044.11	4615.14	4204.31	3828.60	3389.68	3076.00	2723.11	2470.29	2235.62
270.0	5492.98	5055.23	4529.11	4127.65	3758.37	3328.23	3019.23	2677.46	2429.33
315.0	4804.17	4391.59	3922.82	3564.66	3232.26	2855.96	2586.75	2345.64	2123.25
360.0	4963.35	4457.13	4070.88	3695.17	3266.78	2955.44	2678.05	2418.79	2137.89

C/γ(°)	18.0	19.0	20.0	21.0	22.0	23.0	24.0	25.0	26.0
0.0	1938.91	1762.76	1612.35	1455.51	1277.02	1166.18	1166.18	1080.62	1021.98
45.0	2223.91	2017.91	1833.57	1633.42	1501.16	1381.19	1281.12	1175.78	1104.96
90.0	2064.73	1874.53	1669.12	1530.42	1411.62	1163.84	1163.84	1103.97	1031.22
135.0	2385.44	2165.98	1921.35	1750.47	1594.21	1430.93	1317.99	1217.33	1111.99
180.0	2299.41	2075.27	1831.81	1662.68	1521.64	1370.66	1265.31	1167.58	1066.92
225.0	1974.61	1789.68	1630.50	1491.21	1275.26	1156.64	1156.64	1084.07	1005.53
270.0	2199.33	1988.07	1755.73	1601.82	1477.17	1360.71	1237.81	1160.56	1085.65
315.0	1875.12	1708.33	1564.36	1443.81	1253.61	1152.07	1152.07	1072.78	1014.02
360.0	1938.91	1762.76	1612.35	1455.51	1277.02	1166.18	1166.18	1080.62	1021.98

C/γ(°)	27.0	28.0	29.0	30.0	31.0	32.0	33.0	34.0	35.0
0.0	947.36	874.85	792.98	687.00	603.37	520.91	437.22	338.73	270.02
45.0	1041.17	980.31	893.11	810.60	725.74	620.40	533.78	447.76	347.10
90.0	942.91	870.81	790.81	707.01	599.09	512.19	426.92	326.50	256.80
135.0	1042.34	980.31	896.04	820.54	716.96	654.93	549.00	462.97	381.04
180.0	1002.55	942.86	876.14	781.33	698.82	615.13	536.12	434.30	358.80
225.0	951.22	886.73	811.88	705.90	622.33	514.00	430.55	350.84	263.23
270.0	1025.96	955.73	896.04	819.37	710.52	627.42	516.23	427.27	350.61
315.0	941.28	870.93	790.99	704.44	595.82	508.85	422.77	342.65	254.92
360.0	947.36	874.85	792.98	687.00	603.37	520.91	437.22	338.73	270.02

C/γ(°)	36.0	37.0	38.0	39.0	40.0	41.0	42.0	43.0	44.0
0.0	207.46	153.33	102.59	78.71	69.88	64.14	59.34	56.36	53.61
45.0	309.64	309.64	136.30	97.26	75.67	65.84	60.92	57.41	54.31
90.0	199.56	142.15	108.27	84.97	75.38	68.35	62.91	58.17	53.55
135.0	306.72	306.72	156.90	109.50	74.56	64.32	59.99	55.42	52.67
180.0	307.30	307.30	154.56	110.43	75.49	65.78	61.10	56.24	52.79
225.0	201.32	145.84	102.53	71.16	63.03	58.93	55.42	51.09	49.33
270.0	313.74	313.74	135.13	94.16	68.30	61.74	57.35	54.25	51.03
315.0	194.06	141.27	100.89	71.34	63.15	57.53	54.25	51.73	49.51
360.0	207.46	153.33	102.59	78.71	69.88	64.14	59.34	56.36	53.61

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	51.79	50.21	48.57	47.52	46.06	45.12	43.83	42.55	41.14
45.0	52.03	49.86	48.05	47.29	46.17	44.77	43.83	42.66	41.55
90.0	50.86	48.81	47.05	45.65	44.18	43.07	42.55	41.32	39.80
135.0	49.57	48.16	46.58	45.35	44.48	43.77	42.72	42.08	41.38
180.0	49.98	48.16	46.00	44.65	43.77	42.66	41.43	40.73	39.91
225.0	47.70	45.76	44.77	44.13	42.66	41.84	41.02	40.09	39.27
270.0	49.04	47.58	45.88	45.00	44.30	42.96	42.43	41.49	40.32
315.0	47.93	46.76	45.82	44.59	43.31	42.55	41.49	40.38	39.09
360.0	51.79	50.21	48.57	47.52	46.06	45.12	43.83	42.55	41.14

C/γ(°)	54.0	55.0	56.0	57.0	58.0	59.0	60.0	61.0	62.0
0.0	39.74	37.92	36.28	34.18	31.60	29.61	27.10	25.11	23.64
45.0	40.73	38.86	37.45	36.05	33.77	31.60	29.67	27.21	24.87
90.0	38.74	37.57	35.70	34.06	32.19	30.14	27.68	25.75	24.17
135.0	40.44	39.80	38.22	36.99	35.82	33.65	31.49	29.55	26.63
180.0	38.74	37.92	36.87	35.23	33.83	31.72	29.85	27.86	25.63
225.0	38.22	36.64	35.35	33.77	31.78	29.85	27.45	25.22	23.88
270.0	39.21	38.10	36.87	34.94	33.07	31.25	29.44	26.34	24.81
315.0	37.75	35.99	34.41	32.42	29.96	27.97	25.11	23.76	22.24
360.0	39.74	37.92	36.28	34.18	31.60	29.61	27.10	25.11	23.64

C/γ(°)	63.0	64.0	65.0	66.0	67.0	68.0	69.0	70.0	71.0
0.0	21.59	20.60	19.31	17.97	16.97	16.21	15.51	14.98	14.51
45.0	23.58	21.89	20.60	19.43	17.97	16.85	16.15	15.39	14.75
90.0	22.82	21.07	19.78	18.61	17.32	16.44	15.63	14.86	14.46
135.0	25.11	23.70	22.06	20.66	19.49	18.08	17.09	16.15	15.39
180.0	23.82	22.36	20.83	19.72	18.20	17.03	16.21	15.45	14.75
225.0	21.83	20.42	19.08	17.67	16.74	15.74	15.04	14.51	14.10
270.0	23.41	21.19	20.07	18.67	17.32	16.50	15.74	14.86	14.46
315.0	20.72	19.43	18.14	16.97	16.27	15.33	14.75	14.34	13.99
360.0	21.59	20.60	19.31	17.97	16.97	16.21	15.51	14.98	14.51

C/γ(°)	72.0	73.0	74.0	75.0	76.0	77.0	78.0	79.0	80.0
0.0	14.16	13.75	13.40	13.11	12.82	12.47	12.17	11.88	11.53
45.0	14.34	13.99	13.64	13.28	12.99	12.70	12.41	12.00	11.76
90.0	14.05	13.64	13.28	12.99	12.64	12.35	12.06	11.76	11.47
135.0	14.81	14.28	13.93	13.52	13.23	12.93	12.64	12.29	11.94
180.0	14.34	13.93	13.58	13.28	12.93	12.64	12.41	12.11	11.76
225.0	13.75	13.40	13.17	12.87	12.52	12.23	12.00	11.59	11.35
270.0	14.05	13.75	13.34	13.05	12.82	12.41	12.23	11.94	11.59
315.0	13.58	13.28	12.93	12.64	12.41	12.06	11.76	11.53	11.29
360.0	14.16	13.75	13.40	13.11	12.82	12.47	12.17	11.88	11.53

C/γ(°)	81.0	82.0	83.0	84.0	85.0	86.0	87.0	88.0	89.0
0.0	11.29	11.00	10.77	10.53	10.36	10.07	9.83	9.77	9.54
45.0	11.47	11.18	10.89	10.65	10.42	10.30	10.01	9.71	9.66
90.0	11.12	10.89	10.59	10.42	10.24	10.07	9.89	9.71	9.48
135.0	11.70	11.35	11.06	10.83	10.65	10.36	10.18	9.95	9.77
180.0	11.47	11.18	10.94	10.65	10.48	10.30	10.07	9.89	9.83
225.0	11.12	10.89	10.59	10.42	10.24	10.07	9.89	9.71	9.48
270.0	11.35	11.12	10.77	10.53	10.42	10.18	9.89	9.66	9.54
315.0	10.94	10.77	10.59	10.36	10.12	9.89	9.71	9.48	9.66
360.0	11.29	11.00	10.77	10.53	10.36	10.07	9.83	9.77	9.54

Intensity data(cd)

C/γ(°)	90.0
0.0	9.83
45.0	9.48
90.0	9.48
135.0	9.60
180.0	9.48
225.0	9.54
270.0	9.60
315.0	9.54
360.0	9.83