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: 2-2680-L
Luminaire: 92.70.411.00
Report No: 2024416-B006
Ballast type: AC

Test No: 2024416-C006	Voltage(V): 33.760
LampCAT: NICHIA NFCWJ108B-V3	Current(A): 0.577
Lamp flux(lm): 2647.0	Power (W): 19.479
Number of Lamps: 1	PF: 0.000
Length(mm): 0	Width(mm): 0
Phm Type: C	Height(mm): 0

Photometric Results

Lumens(lm): 2170.86, Efficiency(%): 82.01% , Luminous Efficacy(lm/W): 111.45
Central intensity(cd): 4816.460, Maximum intensity(cd): 4816.460
Angle of maximum intensity: C=0.0 γ=0.0
Beam Angle(50%Imax): [C0/180]Total=37.2
[C90/270]Total=37.2
Field angle(10%Imax): [C0/180]Total=64.8
[C90/270]Total=64.8
Maximum s/h(1/2): C0_180=0.61 C90_270=0.61
Maximum s/h(1/4): C0_180=0.60 C90_270=0.60
Up flux rate of lamp(%): 0.00%
Down flux rate of lamp(%): 82.01%
Up flux rate of LUM(%): - -
Down flux rate of LUM(%): 100.00%
CIE Type : Direct lighting
Output flux ratio in π solid angle : 97.807%

Zonal flux distribution table

γ(°)	Average I(cd)	Zonal F(lm)	Sum F(lm)	Eff Flux(%)	Eff Sum(%)
0.0	4816.460	0.000	0	0.00%	0.00%
1.0	4809.584	4.606	4.606	0.17%	0.21%
2.0	4781.932	13.767	18.373	0.52%	0.85%
3.0	4743.015	22.781	41.153	0.86%	1.90%
4.0	4681.054	31.545	72.698	1.19%	3.35%
5.0	4608.340	39.962	112.661	1.51%	5.19%
6.0	4514.338	47.942	160.603	1.81%	7.40%
7.0	4407.681	55.379	215.982	2.09%	9.95%
8.0	4290.270	62.250	278.231	2.35%	12.82%
9.0	4151.133	68.413	346.644	2.58%	15.97%
10.0	4007.094	73.829	420.473	2.79%	19.37%
11.0	3843.085	78.439	498.913	2.96%	22.98%
12.0	3671.906	82.150	581.062	3.10%	26.77%
13.0	3502.118	85.138	666.2	3.22%	30.69%
14.0	3309.213	87.184	753.384	3.29%	34.70%
15.0	3127.574	88.367	841.752	3.34%	38.78%
16.0	2926.696	88.712	930.464	3.35%	42.86%
17.0	2735.327	88.173	1018.636	3.33%	46.92%
18.0	2517.696	86.611	1105.247	3.27%	50.91%
19.0	2324.206	84.239	1189.487	3.18%	54.79%
20.0	2112.501	81.204	1270.691	3.07%	58.53%
21.0	1926.253	77.552	1348.243	2.93%	62.11%
22.0	1743.810	73.751	1421.994	2.79%	65.50%
23.0	1520.627	68.497	1490.491	2.59%	68.66%
24.0	1370.765	63.216	1553.707	2.39%	71.57%
25.0	1256.193	59.731	1613.439	2.26%	74.32%
26.0	1156.127	56.943	1670.382	2.15%	76.95%
27.0	1036.441	53.642	1724.023	2.03%	79.42%
28.0	920.639	49.549	1773.572	1.87%	81.70%
29.0	806.089	45.176	1818.749	1.71%	83.78%
30.0	700.975	40.690	1859.439	1.54%	85.65%
31.0	601.597	36.249	1895.688	1.37%	87.32%
32.0	517.507	32.061	1927.749	1.21%	88.80%
33.0	432.657	27.992	1955.741	1.06%	90.09%
34.0	358.853	23.953	1979.694	0.90%	91.19%
35.0	294.931	20.304	1999.998	0.77%	92.13%
36.0	240.937	17.062	2017.061	0.64%	92.92%
37.0	195.268	14.227	2031.287	0.54%	93.57%

Zonal flux distribution table

γ(°)	Average I(cd)	Zonal F(lm)	Sum F(lm)	Eff Flux(%)	Eff Sum(%)
38.0	136.343	11.069	2042.356	0.42%	94.08%
39.0	100.842	8.096	2050.452	0.31%	94.45%
40.0	84.111	6.451	2056.902	0.24%	94.75%
41.0	74.506	5.648	2062.55	0.21%	95.01%
42.0	67.630	5.164	2067.714	0.20%	95.25%
43.0	62.063	4.804	2072.519	0.18%	95.47%
44.0	57.176	4.500	2077.019	0.17%	95.68%
45.0	52.502	4.215	2081.234	0.16%	95.87%
46.0	48.566	3.953	2085.187	0.15%	96.05%
47.0	44.909	3.718	2088.904	0.14%	96.22%
48.0	41.734	3.503	2092.407	0.13%	96.39%
49.0	38.837	3.309	2095.716	0.12%	96.54%
50.0	36.138	3.126	2098.842	0.12%	96.68%
51.0	33.760	2.957	2101.799	0.11%	96.82%
52.0	31.609	2.805	2104.604	0.11%	96.95%
53.0	29.715	2.668	2107.272	0.10%	97.07%
54.0	28.105	2.548	2109.82	0.10%	97.19%
55.0	26.642	2.444	2112.264	0.09%	97.30%
56.0	25.355	2.350	2114.614	0.09%	97.41%
57.0	24.184	2.265	2116.879	0.09%	97.51%
58.0	23.138	2.188	2119.067	0.08%	97.61%
59.0	22.246	2.122	2121.189	0.08%	97.71%
60.0	21.492	2.066	2123.255	0.08%	97.81%
61.0	20.695	2.013	2125.268	0.08%	97.90%
62.0	20.066	1.964	2127.232	0.07%	97.99%
63.0	19.429	1.921	2129.153	0.07%	98.08%
64.0	18.917	1.882	2131.035	0.07%	98.17%
65.0	18.449	1.849	2132.884	0.07%	98.25%
66.0	18.069	1.822	2134.706	0.07%	98.33%
67.0	17.762	1.802	2136.508	0.07%	98.42%
68.0	17.462	1.784	2138.292	0.07%	98.50%
69.0	17.257	1.771	2140.063	0.07%	98.58%
70.0	17.184	1.769	2141.832	0.07%	98.66%
71.0	17.250	1.780	2143.612	0.07%	98.75%
72.0	17.250	1.794	2145.406	0.07%	98.83%
73.0	17.228	1.803	2147.209	0.07%	98.91%
74.0	17.111	1.805	2149.014	0.07%	98.99%
75.0	16.972	1.801	2150.815	0.07%	99.08%

Zonal flux distribution table

γ(°)	Average I(cd)	Zonal F(lm)	Sum F(lm)	Eff Flux(%)	Eff Sum(%)
76.0	16.723	1.789	2152.603	0.07%	99.16%
77.0	16.320	1.762	2154.365	0.07%	99.24%
78.0	15.808	1.720	2156.085	0.06%	99.32%
79.0	14.835	1.646	2157.731	0.06%	99.40%
80.0	13.599	1.533	2159.264	0.06%	99.47%
81.0	12.473	1.410	2160.674	0.05%	99.53%
82.0	11.741	1.313	2161.987	0.05%	99.59%
83.0	11.302	1.253	2163.24	0.05%	99.65%
84.0	10.929	1.211	2164.451	0.05%	99.70%
85.0	10.541	1.172	2165.623	0.04%	99.76%
86.0	9.971	1.121	2166.744	0.04%	99.81%
87.0	9.554	1.069	2167.813	0.04%	99.86%
88.0	9.305	1.033	2168.846	0.04%	99.91%
89.0	9.151	1.012	2169.857	0.04%	99.95%
90.0	9.064	0.999	2170.856	0.04%	100.00%

Zonal flux distribution table

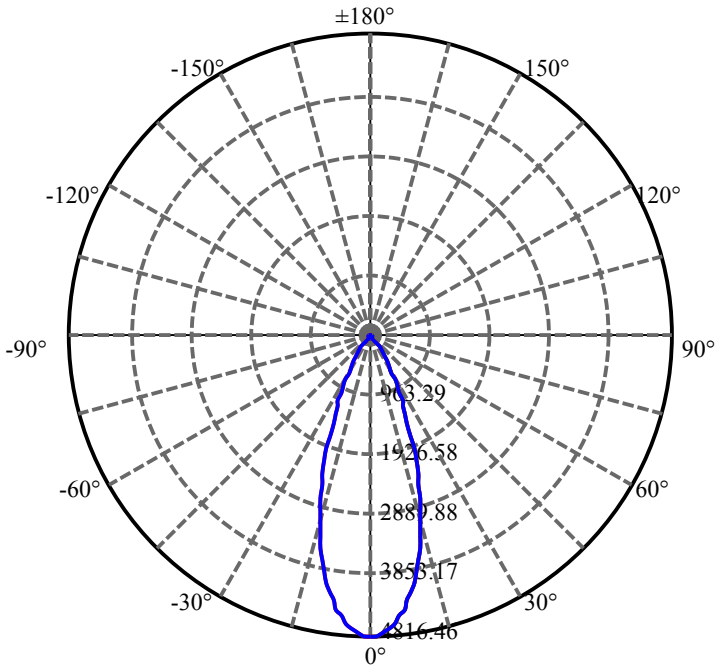
ZONAL LUMEN SUMMARY

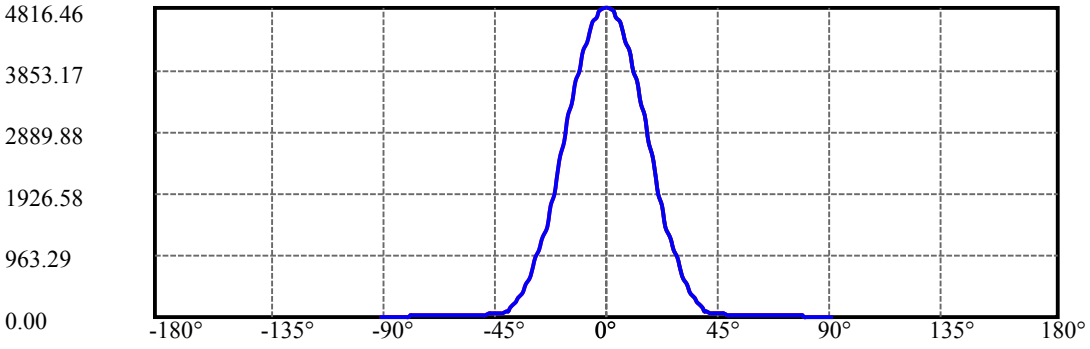
Zone	Lumens	%Lamp	%Fixt
0-30	1859.44	70.25%	85.65%
0-40	2056.90	77.71%	94.75%
0-60	2123.26	80.21%	97.81%
0-90	2169.86	81.97%	99.95%
0-120	2169.86	81.97%	99.95%
0-180	2170.86	82.01%	100.00%
60-90	46.60	1.76%	2.15%
90-120	0.00	0.00%	0.00%
90-130	0.00	0.00%	0.00%
90-150	0.00	0.00%	0.00%
90-180	0.00	0.00%	0.00%
0-27.26	1736.69	65.61%	80.00%

ZONAL LUMEN SUMMARY

0-10	420.47
10-20	850.22
20-30	588.75
30-40	197.46
40-50	41.94
50-60	24.41
60-70	18.58
70-80	17.43
80-90	10.59
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:32.4 Right:32.4
:C90/270Left:32.4 Right:32.4

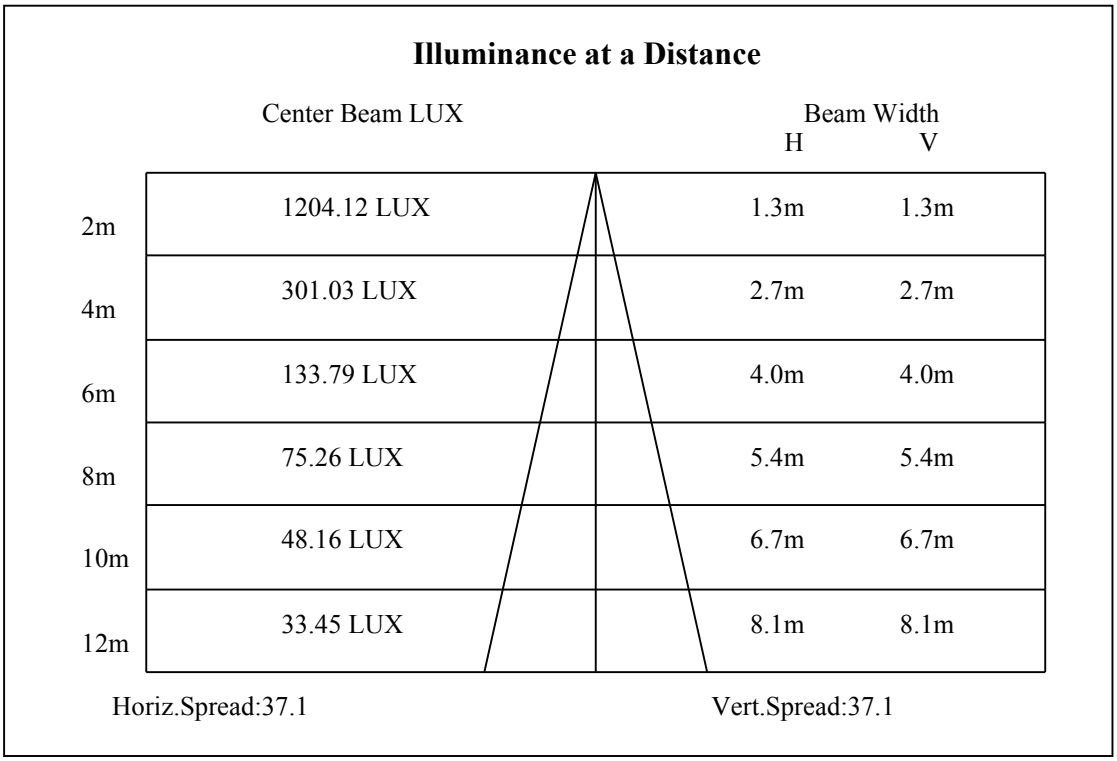
Beam Angle(50%Imax):C0/180Left:18.6 Right:18.6
:C90/270Left:18.6 Right:18.6

Equipment: GMS1980
Temperature(°C): 25.0

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

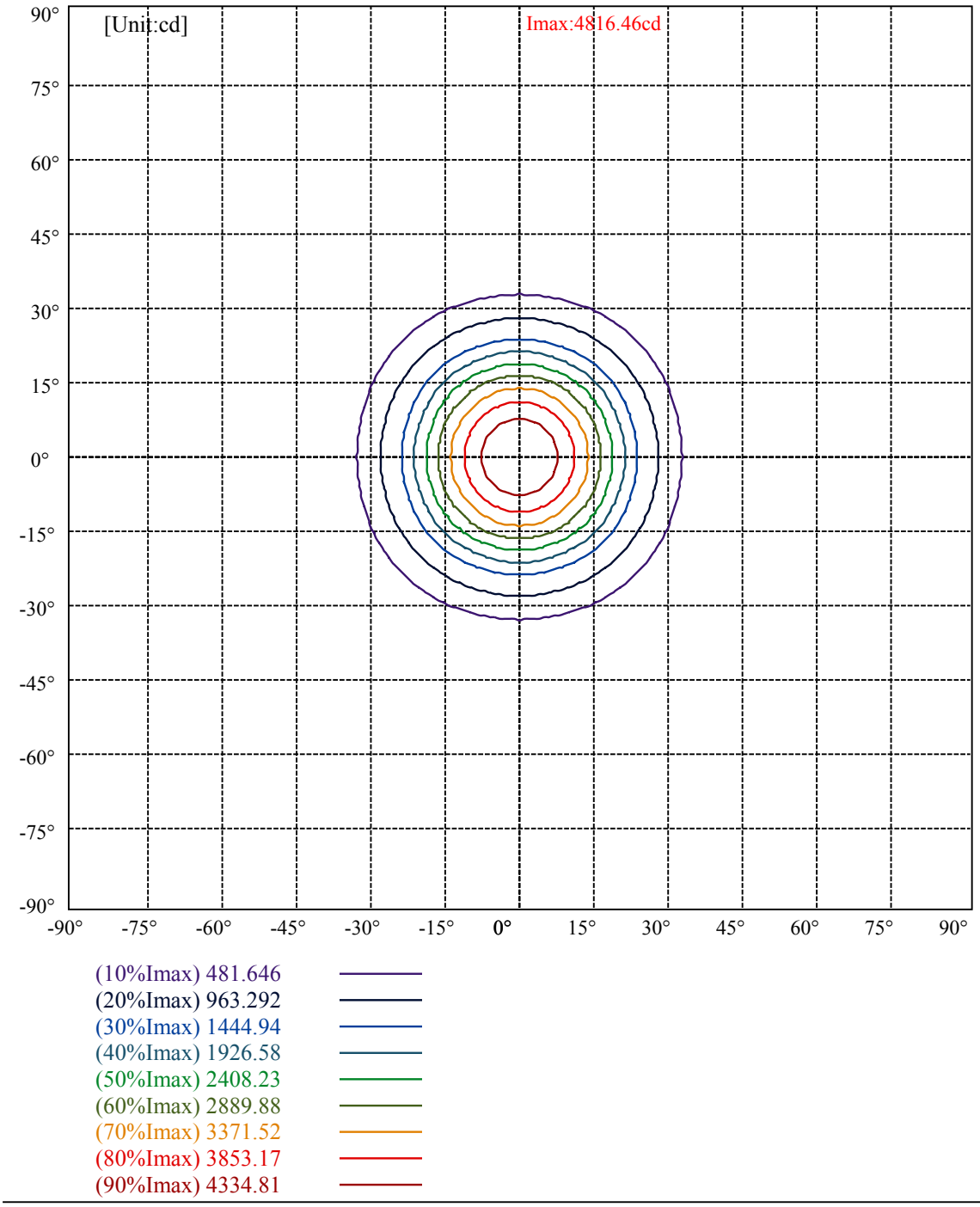
Operator: NT07
Distance(m): 7.65

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)

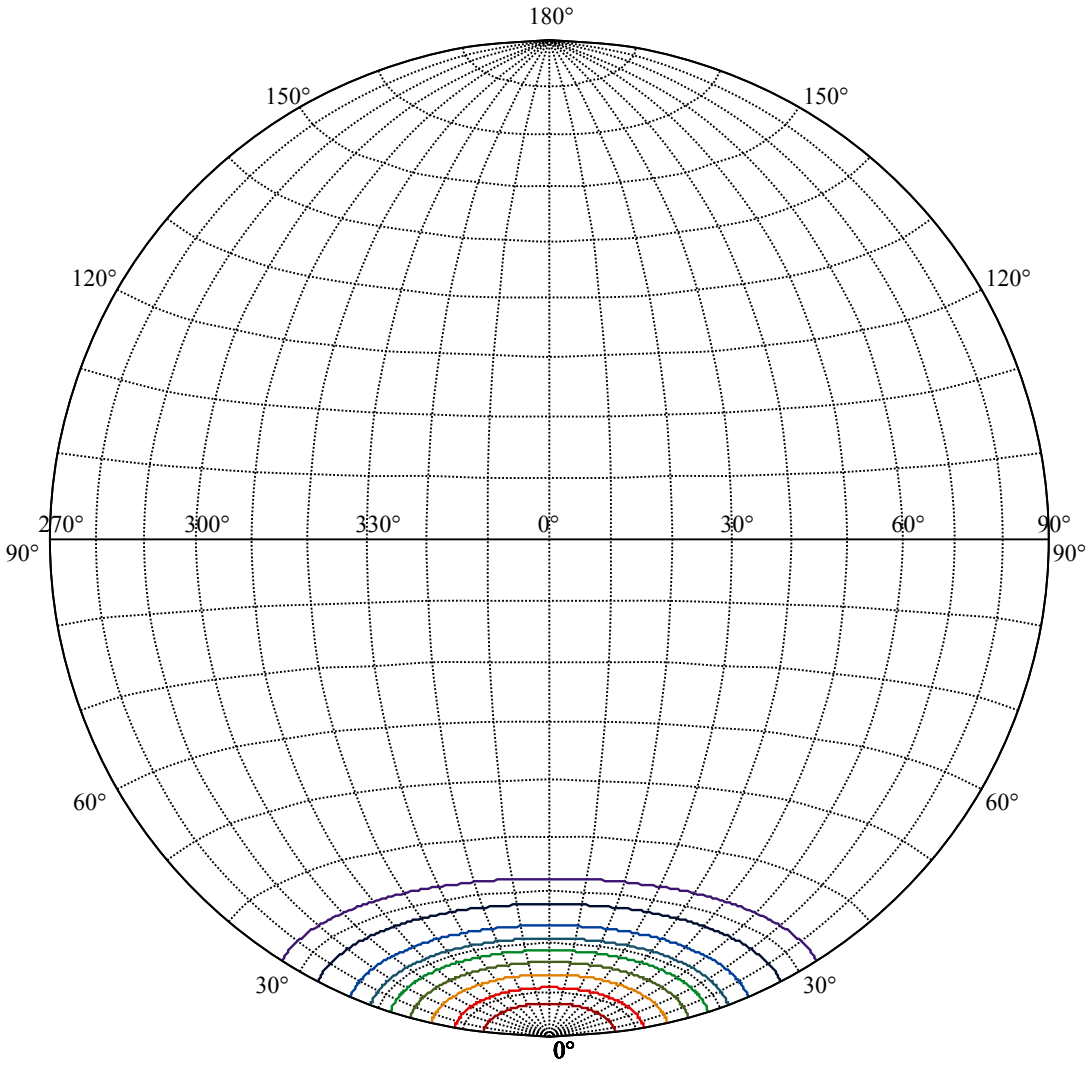


Equipment: GMS1980
Temperature(°C): 25.0

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

Operator: NT07
Distance(m): 7.65

ISO candela diagram on circular web



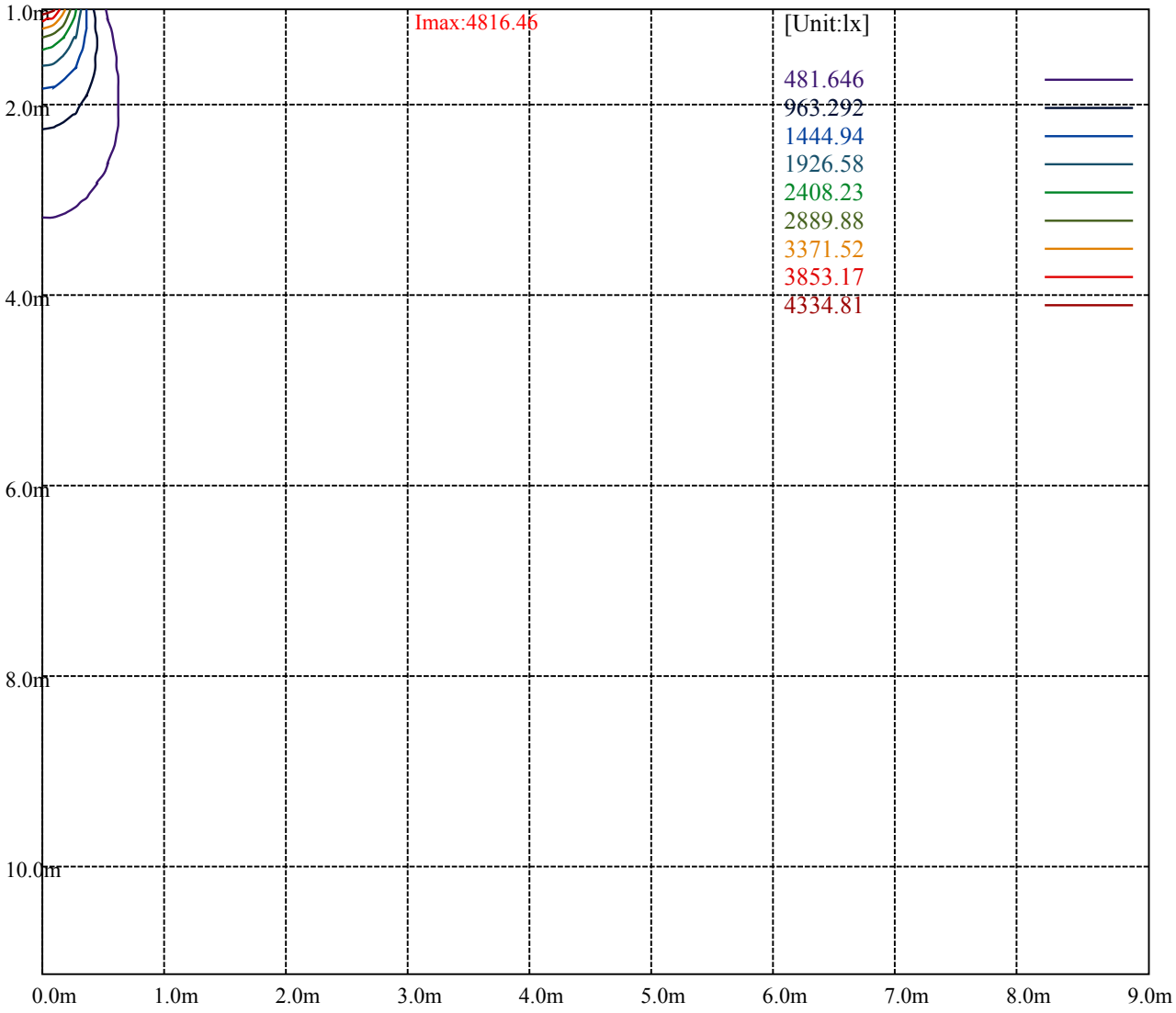
House [Unit:cd] Road

Imax:4816.46

(10%Imax) 481.646
(20%Imax) 963.292
(30%Imax) 1444.94
(40%Imax) 1926.58
(50%Imax) 2408.23
(60%Imax) 2889.88
(70%Imax) 3371.52
(80%Imax) 3853.17
(90%Imax) 4334.81

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

Luminance Limitting Curve(no luminous side)

Luminance Table

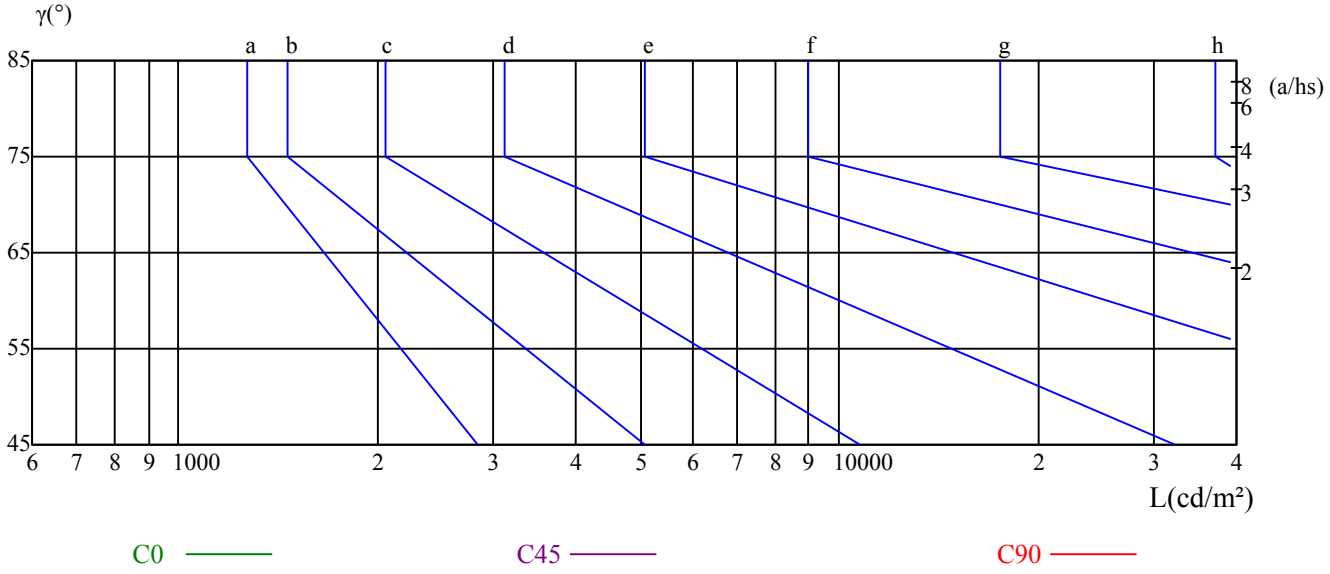
γ	45	50	55	60	65	70	75	80	85
C0	0	0	0	0	0	0	0	0	0
C45	0	0	0	0	0	0	0	0	0
C90	0	0	0	0	0	0	0	0	0

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

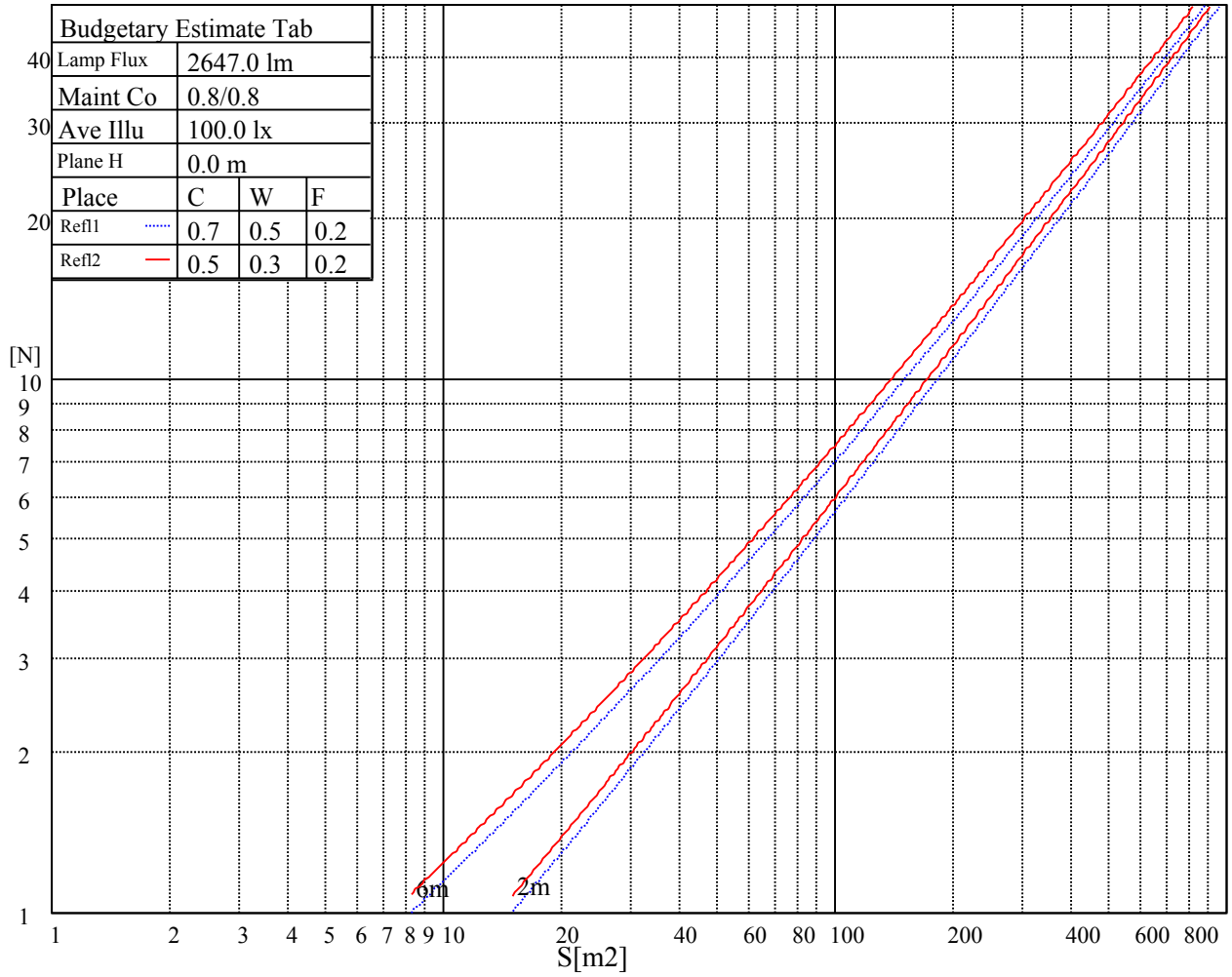
Luminance Limitting Curve



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

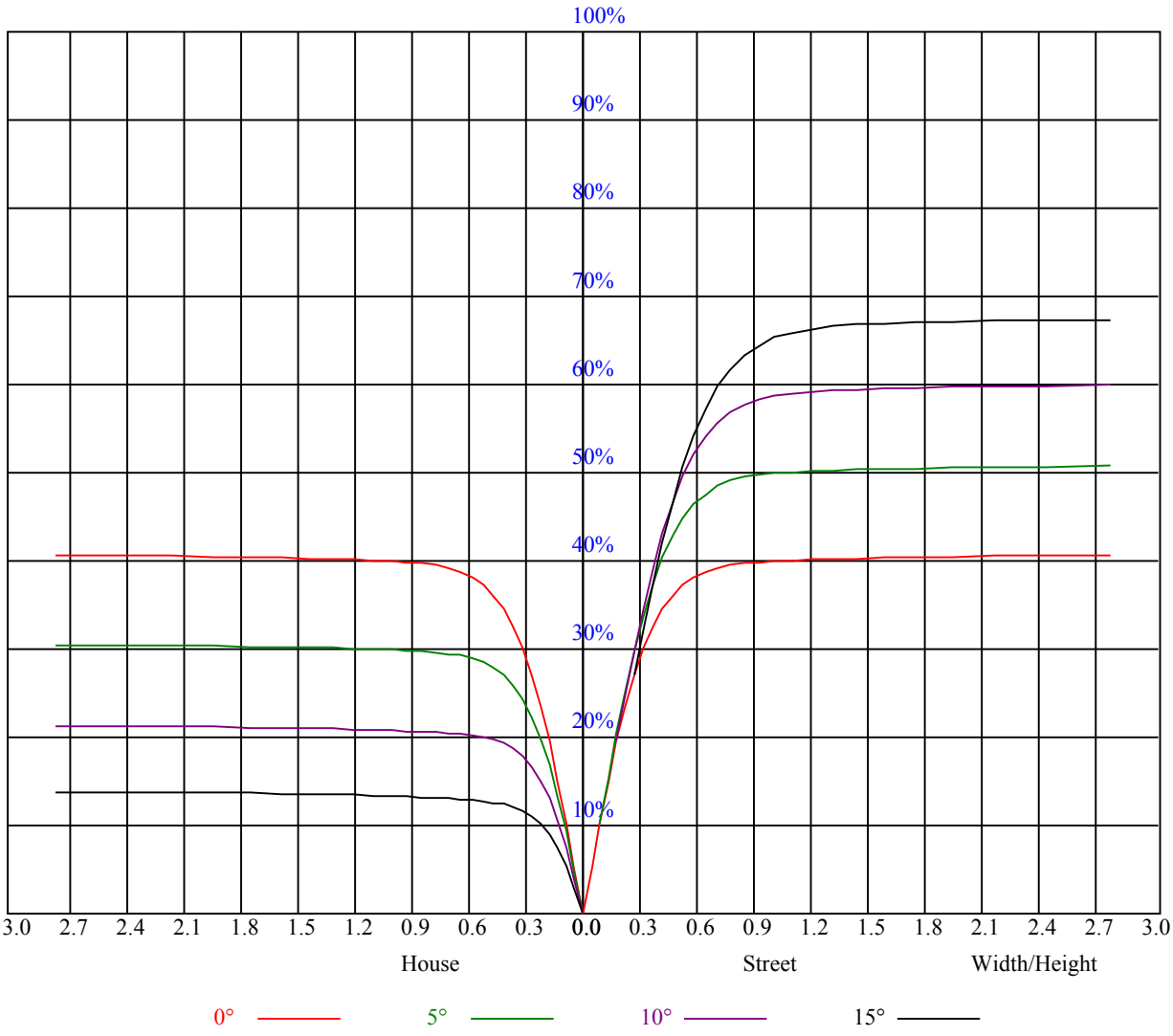


Equipment: GMS1980 Date: 2024/4/16 Operator: NT07
Temperature(°C): 25.0 Humidity(%): 60.0% Distance(m): 7.65

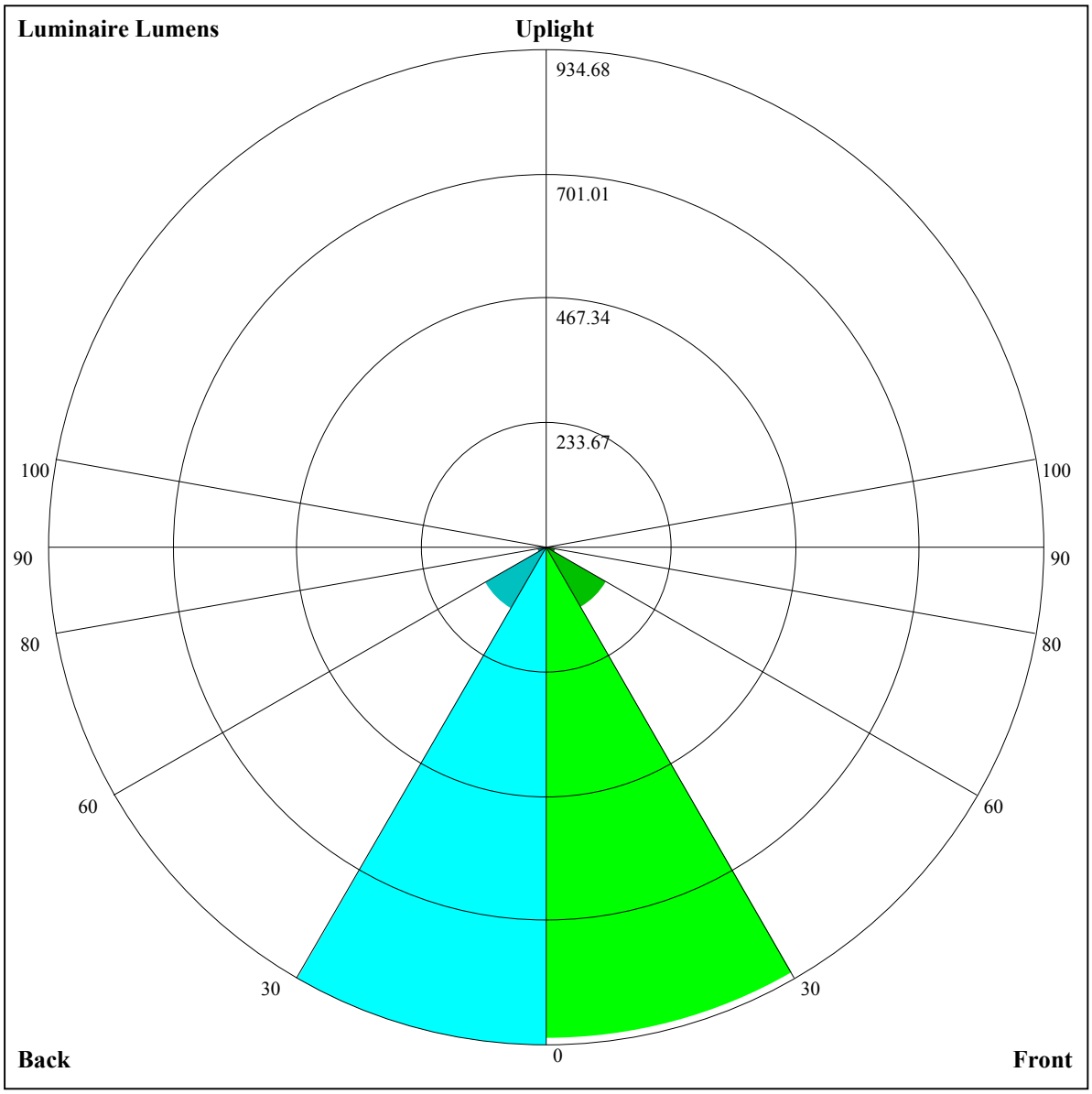
Utilization factor table for indoor luminaire

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	0.98	0.98	0.98	0.95	0.95	0.95	0.91	0.91	0.91	0.87	0.87	0.87	0.84	0.84	0.84	0.82
1	0.91	0.89	0.88	0.89	0.88	0.86	0.86	0.85	0.84	0.83	0.82	0.81	0.80	0.79	0.79	0.77
2	0.86	0.83	0.80	0.84	0.82	0.79	0.82	0.79	0.78	0.79	0.77	0.76	0.77	0.76	0.74	0.73
3	0.81	0.77	0.74	0.80	0.76	0.74	0.78	0.75	0.73	0.76	0.73	0.71	0.74	0.72	0.70	0.69
4	0.77	0.73	0.70	0.76	0.72	0.69	0.74	0.71	0.68	0.72	0.70	0.68	0.71	0.69	0.67	0.66
5	0.73	0.69	0.65	0.72	0.68	0.65	0.71	0.67	0.65	0.69	0.66	0.64	0.68	0.66	0.64	0.62
6	0.69	0.65	0.62	0.69	0.65	0.62	0.68	0.64	0.61	0.66	0.63	0.61	0.65	0.63	0.61	0.60
7	0.66	0.62	0.59	0.66	0.62	0.59	0.65	0.61	0.58	0.64	0.61	0.58	0.63	0.60	0.58	0.57
8	0.63	0.59	0.56	0.63	0.59	0.56	0.62	0.58	0.56	0.61	0.58	0.56	0.60	0.58	0.55	0.54
9	0.61	0.56	0.54	0.60	0.56	0.54	0.60	0.56	0.53	0.59	0.56	0.53	0.58	0.55	0.53	0.52
10	0.58	0.54	0.51	0.58	0.54	0.51	0.57	0.54	0.51	0.57	0.53	0.51	0.56	0.53	0.51	0.50

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=922.24,FM=132.04,FH=18.53,FVH=5.87
BL=934.68,BM=133.5,BH=17.26,BVH=5.82
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	4821.14	4803.59	4765.55	4715.80	4633.28	4557.21	4461.23	4357.06	4201.39
45.0	4811.78	4824.65	4818.80	4787.78	4751.50	4691.81	4618.65	4523.85	4423.19
90.0	4828.16	4818.80	4794.81	4767.89	4716.97	4637.38	4556.62	4467.67	4359.98
135.0	4804.76	4824.65	4815.29	4794.22	4744.48	4702.34	4631.53	4526.19	4437.23
180.0	4821.14	4818.80	4800.66	4766.13	4728.09	4651.43	4565.40	4478.79	4375.20
225.0	4811.78	4791.30	4750.92	4698.24	4606.36	4522.68	4392.76	4273.37	4141.70
270.0	4828.16	4817.05	4793.64	4753.84	4678.93	4609.29	4497.51	4391.00	4272.20
315.0	4804.76	4777.84	4715.80	4660.21	4588.81	4494.59	4391.00	4243.52	4111.26
360.0	4821.14	4803.59	4765.55	4715.80	4633.28	4557.21	4461.23	4357.06	4201.39

C/γ(°)	9.0	10.0	11.0	12.0	13.0	14.0	15.0	16.0	17.0
0.0	4066.20	3925.16	3775.34	3573.44	3407.24	3235.77	3061.37	2833.72	2647.62
45.0	4317.85	4191.44	4024.65	3879.52	3722.67	3518.43	3346.38	3172.56	2944.33
90.0	4203.14	4066.79	3920.48	3719.16	3557.64	3339.94	3163.78	2981.19	2795.09
135.0	4334.23	4211.34	4041.04	3892.98	3737.31	3567.59	3349.89	3171.98	2990.56
180.0	4219.53	4083.17	3930.43	3774.76	3569.35	3398.46	3223.48	3001.68	2817.92
225.0	3992.46	3800.51	3637.82	3478.05	3304.82	3085.95	2903.94	2724.28	2532.91
270.0	4107.17	3962.03	3801.68	3605.04	3435.91	3262.69	3086.54	2863.56	2680.39
315.0	3968.47	3816.31	3613.24	3452.30	3282.00	3064.88	2885.22	2664.59	2473.80
360.0	4066.20	3925.16	3775.34	3573.44	3407.24	3235.77	3061.37	2833.72	2647.62

C/γ(°)	18.0	19.0	20.0	21.0	22.0	23.0	24.0	25.0	26.0
0.0	2410.60	2226.25	2037.81	1813.09	1643.37	1490.63	1152.60	1152.60	1098.23
45.0	2760.56	2575.05	2341.54	2154.86	1972.27	1797.28	1592.46	1450.83	1322.67
90.0	2562.76	2377.24	2190.56	2008.55	1784.99	1615.28	1469.56	1163.72	1163.72
135.0	2758.81	2573.88	2343.30	2157.20	1976.95	1801.97	1597.72	1454.93	1327.35
180.0	2581.49	2390.70	2195.82	2012.65	1799.04	1627.57	1467.80	1341.98	1192.75
225.0	2294.14	2106.87	1873.95	1700.72	1537.44	1158.51	1158.51	1129.19	1012.67
270.0	2489.02	2295.90	2050.69	1868.68	1700.72	1506.43	1360.12	1216.16	1101.45
315.0	2284.19	2047.76	1866.34	1694.28	1535.69	1167.35	1167.35	1140.14	1030.17
360.0	2410.60	2226.25	2037.81	1813.09	1643.37	1490.63	1152.60	1152.60	1098.23

C/γ(°)	27.0	28.0	29.0	30.0	31.0	32.0	33.0	34.0	35.0
0.0	985.34	876.32	752.54	663.29	582.18	487.73	416.33	350.84	274.18
45.0	1203.87	1066.92	959.24	828.15	732.76	644.98	542.56	465.90	392.16
90.0	1080.91	971.06	838.45	739.20	626.60	544.20	465.25	390.93	304.84
135.0	1206.21	1059.32	944.61	836.35	713.45	624.49	540.81	443.07	371.68
180.0	1068.68	957.49	845.71	711.69	622.74	538.47	442.49	374.60	297.94
225.0	870.00	763.89	666.81	577.15	474.73	400.06	333.23	257.15	202.49
270.0	981.48	879.07	745.64	646.73	558.36	474.68	381.63	312.57	297.35
315.0	895.04	791.05	695.72	605.24	501.95	425.46	338.96	275.76	218.82
360.0	985.34	876.32	752.54	663.29	582.18	487.73	416.33	350.84	274.18

C/γ(°)	36.0	37.0	38.0	39.0	40.0	41.0	42.0	43.0	44.0
0.0	216.71	165.15	115.41	90.12	78.60	71.10	63.73	59.05	54.78
45.0	326.03	310.23	235.85	138.99	104.46	81.23	73.39	66.48	61.21
90.0	243.92	187.80	140.45	101.42	85.62	77.54	68.76	63.20	58.35
135.0	307.30	307.30	173.52	131.21	98.61	86.32	78.89	71.87	66.19
180.0	297.94	228.53	139.28	102.12	88.13	80.64	73.39	66.31	61.33
225.0	154.79	111.02	90.71	81.46	72.74	66.72	61.80	57.24	52.03
270.0	225.37	136.01	104.46	83.34	75.44	68.76	61.98	57.41	53.26
315.0	155.44	116.11	91.06	78.07	69.29	63.73	59.11	54.95	50.27
360.0	216.71	165.15	115.41	90.12	78.60	71.10	63.73	59.05	54.78

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	50.86	46.53	43.48	40.03	37.63	35.29	32.89	31.08	29.50
45.0	55.65	51.68	47.11	43.83	40.97	37.63	35.29	33.12	30.84
90.0	52.85	48.92	44.59	41.49	38.74	36.17	33.88	31.37	29.55
135.0	59.87	55.48	51.38	47.75	43.48	40.50	37.16	34.82	32.71
180.0	56.88	51.73	48.05	44.77	41.08	38.39	35.93	33.18	31.19
225.0	48.34	45.06	42.02	38.62	36.17	33.94	31.49	29.67	27.74
270.0	48.52	45.18	42.14	39.39	36.87	34.12	32.07	30.31	28.32
315.0	47.05	43.95	40.50	37.98	35.76	33.07	31.37	29.32	27.86
360.0	50.86	46.53	43.48	40.03	37.63	35.29	32.89	31.08	29.50

C/γ(°)	54.0	55.0	56.0	57.0	58.0	59.0	60.0	61.0	62.0
0.0	27.74	26.45	25.28	24.23	23.06	22.24	21.59	20.95	20.25
45.0	29.14	27.68	26.34	24.87	23.82	22.82	22.00	21.01	20.37
90.0	28.03	26.22	24.99	23.88	22.59	21.71	20.89	20.01	19.43
135.0	30.43	28.73	27.27	25.69	24.52	23.41	22.59	21.48	20.72
180.0	29.50	27.62	26.28	25.11	24.05	22.88	22.06	21.30	20.60
225.0	26.45	25.28	23.88	23.00	22.18	21.42	20.60	19.96	19.43
270.0	26.92	25.63	24.35	23.29	22.30	21.54	20.89	20.31	19.72
315.0	26.63	25.52	24.46	23.41	22.59	21.95	21.30	20.54	20.01
360.0	27.74	26.45	25.28	24.23	23.06	22.24	21.59	20.95	20.25

C/γ(°)	63.0	64.0	65.0	66.0	67.0	68.0	69.0	70.0	71.0
0.0	19.72	19.25	19.14	19.61	20.37	21.19	22.06	22.94	23.99
45.0	19.61	19.14	18.61	18.08	17.62	17.21	16.80	16.39	15.86
90.0	18.84	18.26	17.85	17.38	17.03	16.50	16.09	15.68	15.33
135.0	20.07	19.61	18.90	18.38	17.97	17.38	16.97	16.44	16.04
180.0	19.84	19.25	18.61	18.08	17.62	17.03	16.80	16.74	16.97
225.0	18.90	18.26	17.85	17.38	16.80	16.39	15.86	15.51	15.10
270.0	19.08	18.61	18.14	17.73	17.21	16.80	16.50	16.39	16.62
315.0	19.37	18.96	18.49	17.91	17.50	17.21	16.97	17.38	18.08
360.0	19.72	19.25	19.14	19.61	20.37	21.19	22.06	22.94	23.99

C/γ(°)	72.0	73.0	74.0	75.0	76.0	77.0	78.0	79.0	80.0
0.0	24.11	23.82	23.17	21.95	21.07	20.07	19.20	17.62	14.92
45.0	15.45	15.04	14.57	14.22	13.87	13.52	13.17	12.82	12.52
90.0	14.86	14.63	14.75	15.16	15.16	15.04	14.92	14.57	12.93
135.0	15.68	15.39	15.16	15.39	15.45	15.45	15.57	15.39	14.86
180.0	17.09	16.85	16.39	15.74	14.86	14.16	13.58	12.76	12.23
225.0	14.75	14.34	13.99	13.69	13.40	13.05	12.76	12.58	12.41
270.0	17.09	17.62	18.14	18.55	18.61	18.43	17.97	16.62	14.86
315.0	18.96	20.13	20.72	21.07	21.36	20.83	19.31	16.33	14.05
360.0	24.11	23.82	23.17	21.95	21.07	20.07	19.20	17.62	14.92

C/γ(°)	81.0	82.0	83.0	84.0	85.0	86.0	87.0	88.0	89.0
0.0	12.17	11.29	10.89	10.59	10.36	9.95	9.48	9.19	9.01
45.0	12.23	12.00	11.65	11.47	11.18	11.18	9.83	9.48	9.25
90.0	11.82	11.35	11.12	10.83	10.24	9.77	9.60	9.36	9.19
135.0	13.81	12.35	11.24	10.77	10.42	10.01	9.71	9.54	9.36
180.0	11.82	11.41	10.94	10.65	10.18	9.71	9.60	9.36	9.13
225.0	12.23	12.11	12.06	10.83	9.83	9.54	9.31	9.13	9.07
270.0	13.11	11.82	11.59	11.53	11.35	9.83	9.54	9.25	9.13
315.0	12.58	11.59	10.94	10.77	10.77	9.77	9.36	9.13	9.07
360.0	12.17	11.29	10.89	10.59	10.36	9.95	9.48	9.19	9.01

Intensity data(cd)

C/γ(°)	90.0
0.0	9.01
45.0	9.01
90.0	9.07
135.0	9.13
180.0	9.01
225.0	9.07
270.0	9.13
315.0	9.07
360.0	9.01