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: 2-2759-L
Luminaire: 92.70.412.00
Report No: 2024806-B015
Ballast type: AC

Test No: 2024806-C015	Voltage(V): 34.970
LampCAT: CITIZEN CLU038 LES14.5	Current(A): 0.450
Lamp flux(lm): 2571.0	Power (W): 15.736
Number of Lamps: 1	PF: 0.000
Length(mm): 0	Width(mm): 0
Phm Type: C	Height(mm): 0

Photometric Results

Lumens(lm): 2434.47, Efficiency(%): 94.69% , Luminous Efficacy(lm/W): 154.71
Central intensity(cd): 5249.820, Maximum intensity(cd): 5249.820
Angle of maximum intensity: C=0.0 γ=0.0
Beam Angle(50%Imax): [C0/180]Total=36.4
[C90/270]Total=36.4
Field angle(10%Imax): [C0/180]Total=67.4
[C90/270]Total=67.4
Maximum s/h(1/2): C0_180=0.59 C90_270=0.59
Maximum s/h(1/4): C0_180=0.63 C90_270=0.63
Up flux rate of lamp(%): 0.00%
Down flux rate of lamp(%): 94.69%
Up flux rate of LUM(%): - -
Down flux rate of LUM(%): 100.00%
CIE Type : Direct lighting
Output flux ratio in π solid angle : 98.031%

Zonal flux distribution table

γ(°)	Average I(cd)	Zonal F(lm)	Sum F(lm)	Eff Flux(%)	Eff Sum(%)
0.0	5249.819	0.000	0	0.00%	0.00%
1.0	5238.334	5.018	5.018	0.20%	0.21%
2.0	5202.562	14.986	20.004	0.58%	0.82%
3.0	5147.186	24.753	44.757	0.96%	1.84%
4.0	5058.305	34.161	78.918	1.33%	3.24%
5.0	4963.425	43.113	122.031	1.68%	5.01%
6.0	4836.943	51.504	173.535	2.00%	7.13%
7.0	4692.393	59.148	232.683	2.30%	9.56%
8.0	4530.285	66.005	298.688	2.57%	12.27%
9.0	4353.255	71.996	370.685	2.80%	15.23%
10.0	4177.760	77.203	447.887	3.00%	18.40%
11.0	3999.852	81.711	529.598	3.18%	21.75%
12.0	3808.922	85.361	614.959	3.32%	25.26%
13.0	3625.601	88.229	703.188	3.43%	28.88%
14.0	3428.526	90.292	793.481	3.51%	32.59%
15.0	3247.692	91.654	885.135	3.56%	36.36%
16.0	3050.178	92.281	977.416	3.59%	40.15%
17.0	2866.271	92.135	1069.551	3.58%	43.93%
18.0	2669.709	91.276	1160.827	3.55%	47.68%
19.0	2488.801	89.748	1250.575	3.49%	51.37%
20.0	2313.160	87.889	1338.464	3.42%	54.98%
21.0	2143.079	85.569	1424.033	3.33%	58.49%
22.0	1985.069	82.957	1506.99	3.23%	61.90%
23.0	1827.936	80.007	1586.997	3.11%	65.19%
24.0	1698.016	77.090	1664.087	3.00%	68.36%
25.0	1565.316	74.201	1738.288	2.89%	71.40%
26.0	1430.963	70.728	1809.015	2.75%	74.31%
27.0	1268.665	66.047	1875.062	2.57%	77.02%
28.0	1202.308	62.560	1937.622	2.43%	79.59%
29.0	1094.042	60.079	1997.701	2.34%	82.06%
30.0	966.536	55.635	2053.336	2.16%	84.34%
31.0	842.044	50.330	2103.667	1.96%	86.41%
32.0	718.715	44.714	2148.38	1.74%	88.25%
33.0	603.945	38.966	2187.347	1.52%	89.85%
34.0	497.997	33.348	2220.695	1.30%	91.22%
35.0	396.417	27.777	2248.472	1.08%	92.36%
36.0	308.787	22.454	2270.926	0.87%	93.28%
37.0	243.176	18.002	2288.927	0.70%	94.02%

Zonal flux distribution table

γ(°)	Average I(cd)	Zonal F(lm)	Sum F(lm)	Eff Flux(%)	Eff Sum(%)
38.0	218.048	15.395	2304.322	0.60%	94.65%
39.0	116.189	11.408	2315.731	0.44%	95.12%
40.0	90.095	7.194	2322.925	0.28%	95.42%
41.0	76.284	5.925	2328.85	0.23%	95.66%
42.0	66.489	5.187	2334.037	0.20%	95.87%
43.0	59.525	4.668	2338.705	0.18%	96.07%
44.0	54.009	4.285	2342.99	0.17%	96.24%
45.0	49.393	3.974	2346.964	0.15%	96.41%
46.0	45.201	3.699	2350.663	0.14%	96.56%
47.0	41.522	3.449	2354.113	0.13%	96.70%
48.0	38.340	3.228	2357.341	0.13%	96.83%
49.0	35.472	3.031	2360.372	0.12%	96.96%
50.0	33.043	2.857	2363.229	0.11%	97.07%
51.0	30.936	2.707	2365.936	0.11%	97.18%
52.0	29.247	2.583	2368.518	0.10%	97.29%
53.0	27.820	2.482	2371.001	0.10%	97.39%
54.0	26.518	2.395	2373.396	0.09%	97.49%
55.0	25.487	2.321	2375.717	0.09%	97.59%
56.0	24.499	2.259	2377.976	0.09%	97.68%
57.0	23.716	2.205	2380.18	0.09%	97.77%
58.0	22.948	2.158	2382.338	0.08%	97.86%
59.0	22.392	2.120	2384.458	0.08%	97.95%
60.0	21.836	2.090	2386.547	0.08%	98.03%
61.0	21.397	2.063	2388.611	0.08%	98.12%
62.0	20.914	2.039	2390.649	0.08%	98.20%
63.0	20.380	2.008	2392.658	0.08%	98.28%
64.0	19.905	1.977	2394.635	0.08%	98.36%
65.0	19.378	1.944	2396.579	0.08%	98.44%
66.0	18.815	1.906	2398.484	0.07%	98.52%
67.0	18.310	1.867	2400.351	0.07%	98.60%
68.0	17.827	1.831	2402.182	0.07%	98.67%
69.0	17.359	1.795	2403.977	0.07%	98.75%
70.0	16.913	1.760	2405.737	0.07%	98.82%
71.0	16.533	1.729	2407.465	0.07%	98.89%
72.0	16.086	1.696	2409.162	0.07%	98.96%
73.0	15.677	1.661	2410.823	0.06%	99.03%
74.0	15.289	1.628	2412.45	0.06%	99.10%
75.0	14.938	1.597	2414.048	0.06%	99.16%

Zonal flux distribution table

γ(°)	Average I(cd)	Zonal F(lm)	Sum F(lm)	Eff Flux(%)	Eff Sum(%)
76.0	14.609	1.568	2415.616	0.06%	99.23%
77.0	14.250	1.539	2417.155	0.06%	99.29%
78.0	13.950	1.510	2418.664	0.06%	99.35%
79.0	13.628	1.482	2420.146	0.06%	99.41%
80.0	13.292	1.451	2421.597	0.06%	99.47%
81.0	12.955	1.419	2423.017	0.06%	99.53%
82.0	12.648	1.388	2424.405	0.05%	99.59%
83.0	12.370	1.360	2425.765	0.05%	99.64%
84.0	12.114	1.334	2427.099	0.05%	99.70%
85.0	11.843	1.308	2428.407	0.05%	99.75%
86.0	11.434	1.272	2429.679	0.05%	99.80%
87.0	11.083	1.232	2430.911	0.05%	99.85%
88.0	10.893	1.204	2432.115	0.05%	99.90%
89.0	10.754	1.186	2433.302	0.05%	99.95%
90.0	10.578	1.170	2434.471	0.05%	100.00%

Zonal flux distribution table

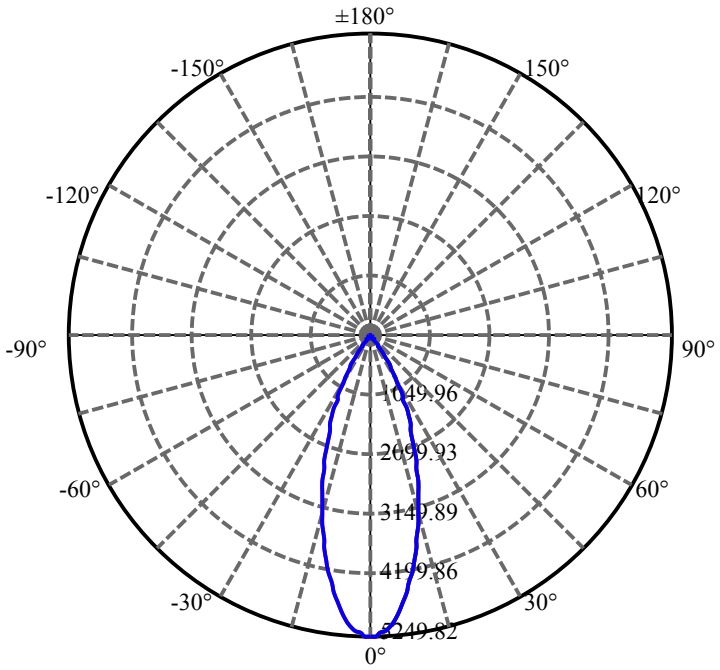
ZONAL LUMEN SUMMARY

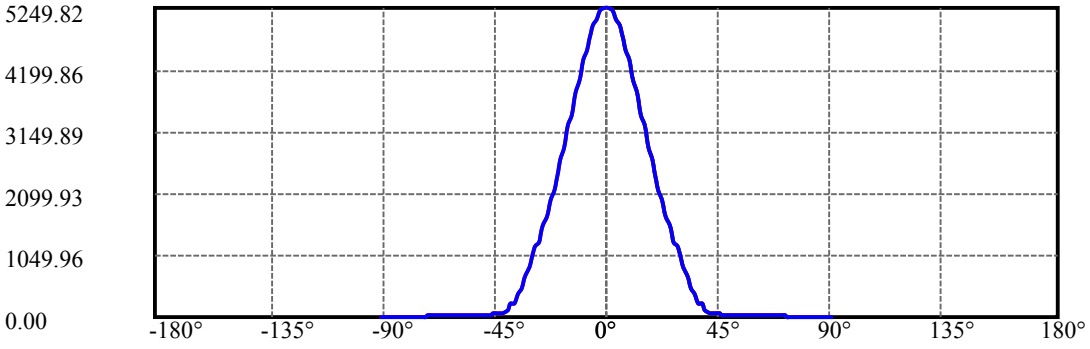
Zone	Lumens	%Lamp	%Fixt
0-30	2053.34	79.87%	84.34%
0-40	2322.93	90.35%	95.42%
0-60	2386.55	92.83%	98.03%
0-90	2433.30	94.64%	99.95%
0-120	2433.30	94.64%	99.95%
0-180	2434.47	94.69%	100.00%
60-90	46.75	1.82%	1.92%
90-120	0.00	0.00%	0.00%
90-130	0.00	0.00%	0.00%
90-150	0.00	0.00%	0.00%
90-180	0.00	0.00%	0.00%
0-28.17	1947.58	75.75%	80.00%

ZONAL LUMEN SUMMARY

0-10	447.89
10-20	890.58
20-30	714.87
30-40	269.59
40-50	40.30
50-60	23.32
60-70	19.19
70-80	15.86
80-90	11.70
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):

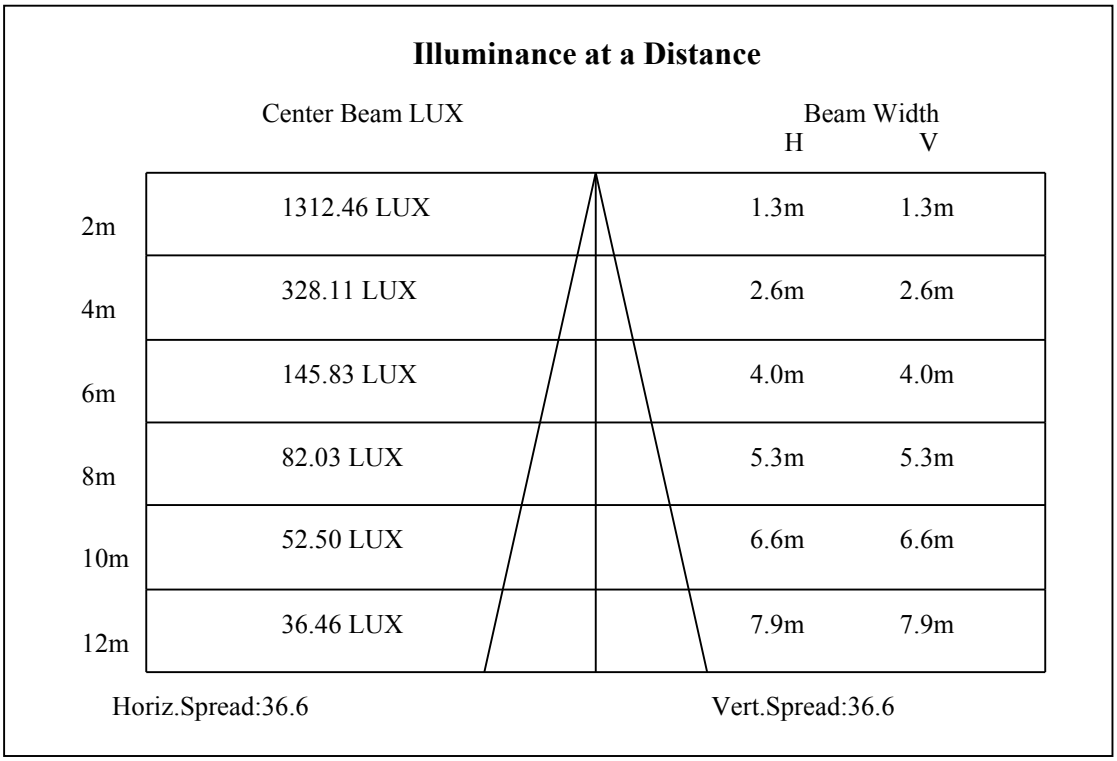
C0/C180:

C90/C270:

Field angle(10%Imax):C0/180Left:33.7 Right:33.7
:C90/270Left:33.7 Right:33.7

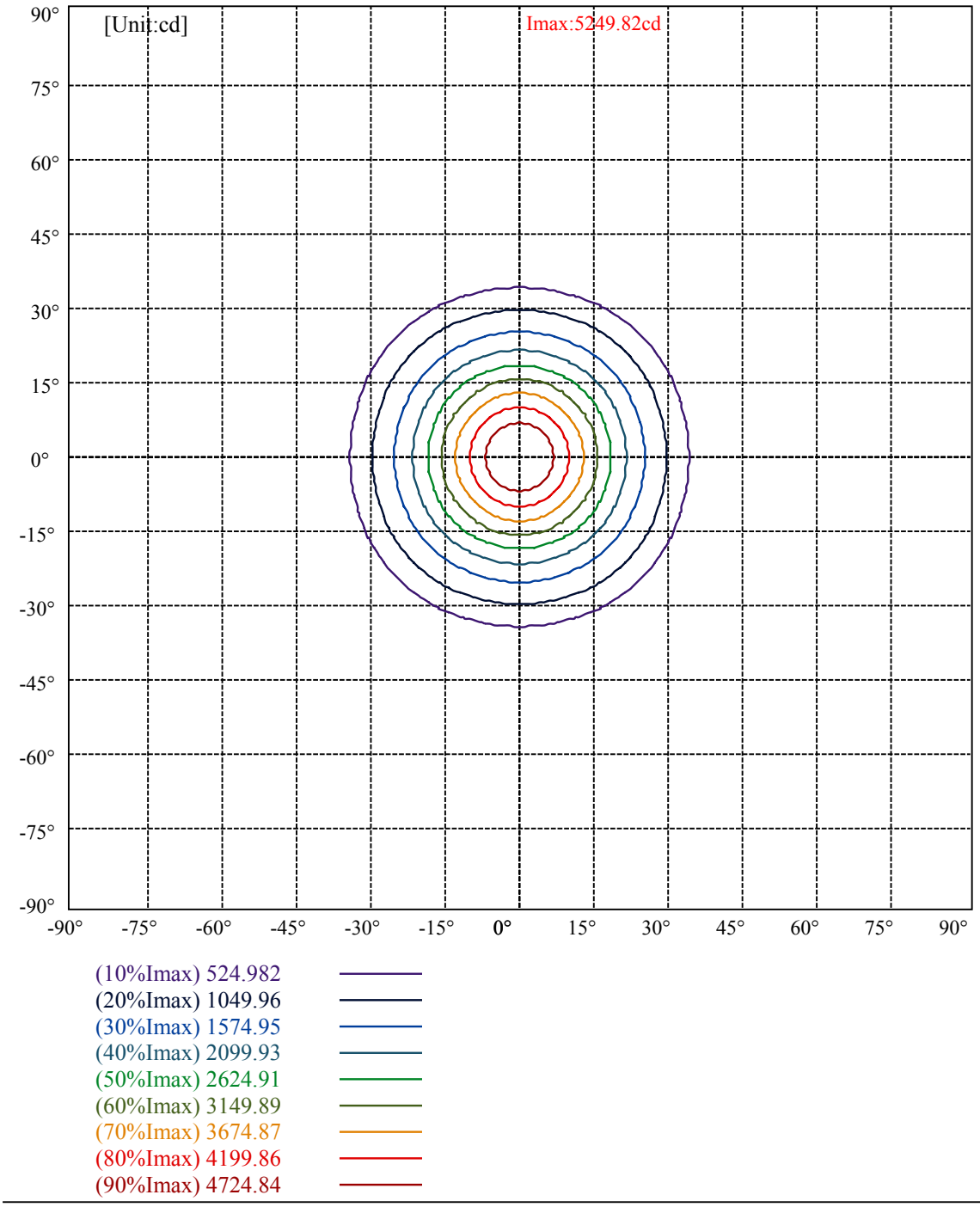
Beam Angle(50%Imax):C0/180Left:18.2 Right:18.2
:C90/270Left:18.2 Right:18.2

Lux distance Curve



Equipment: GMS1980 Date: 2024/8/6 Operator: NT07
Temperature(°C): 25.0 Humidity(%): 60.0% Distance(m): 7.65

ISO-Intensity(V-H)

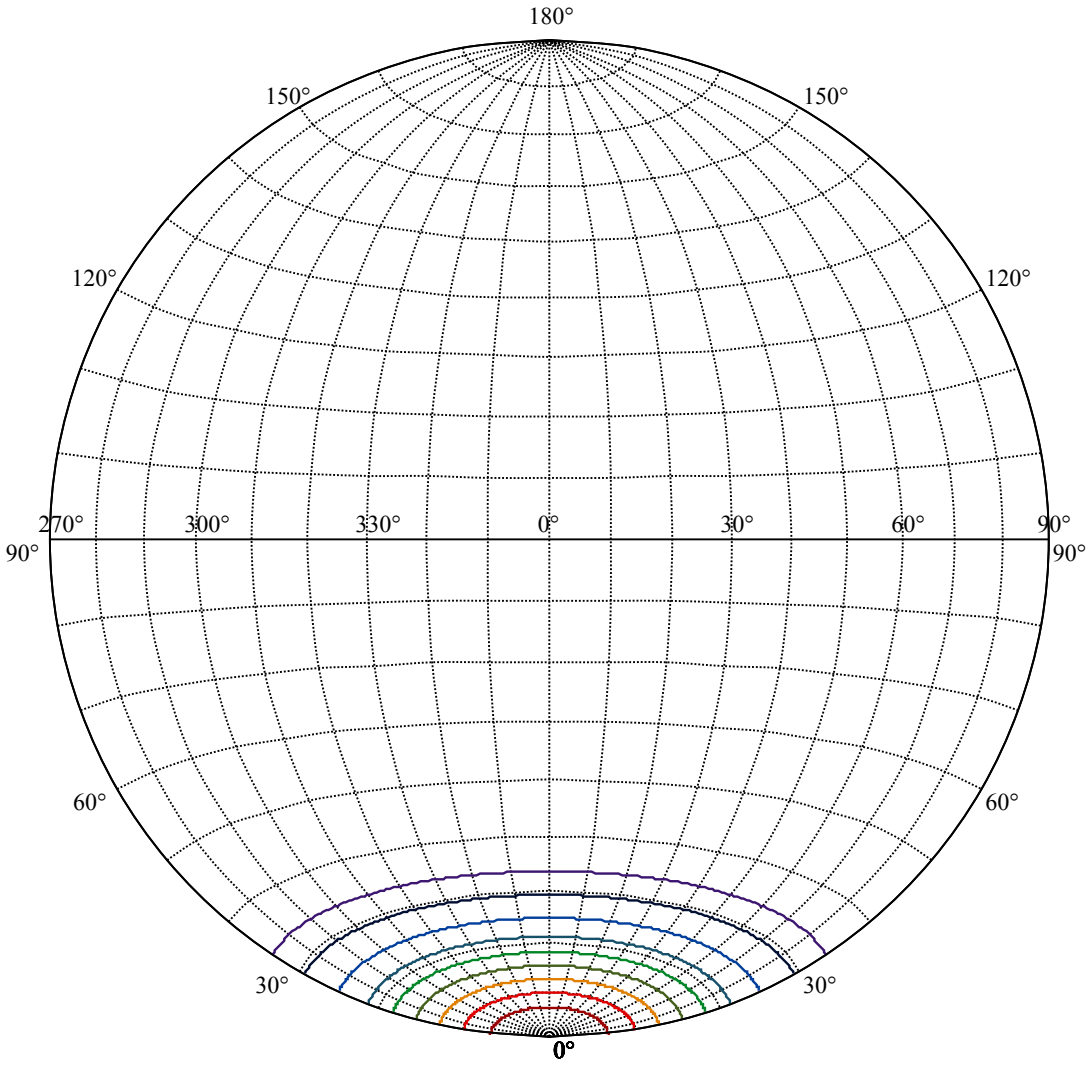


Equipment: GMS1980
Temperature(°C): 25.0

Date: 2024/8/6
Humidity(%): 60.0%

Operator: NT07
Distance(m): 7.65

ISO candela diagram on circular web



[Unit:cd]

Imax:5249.82

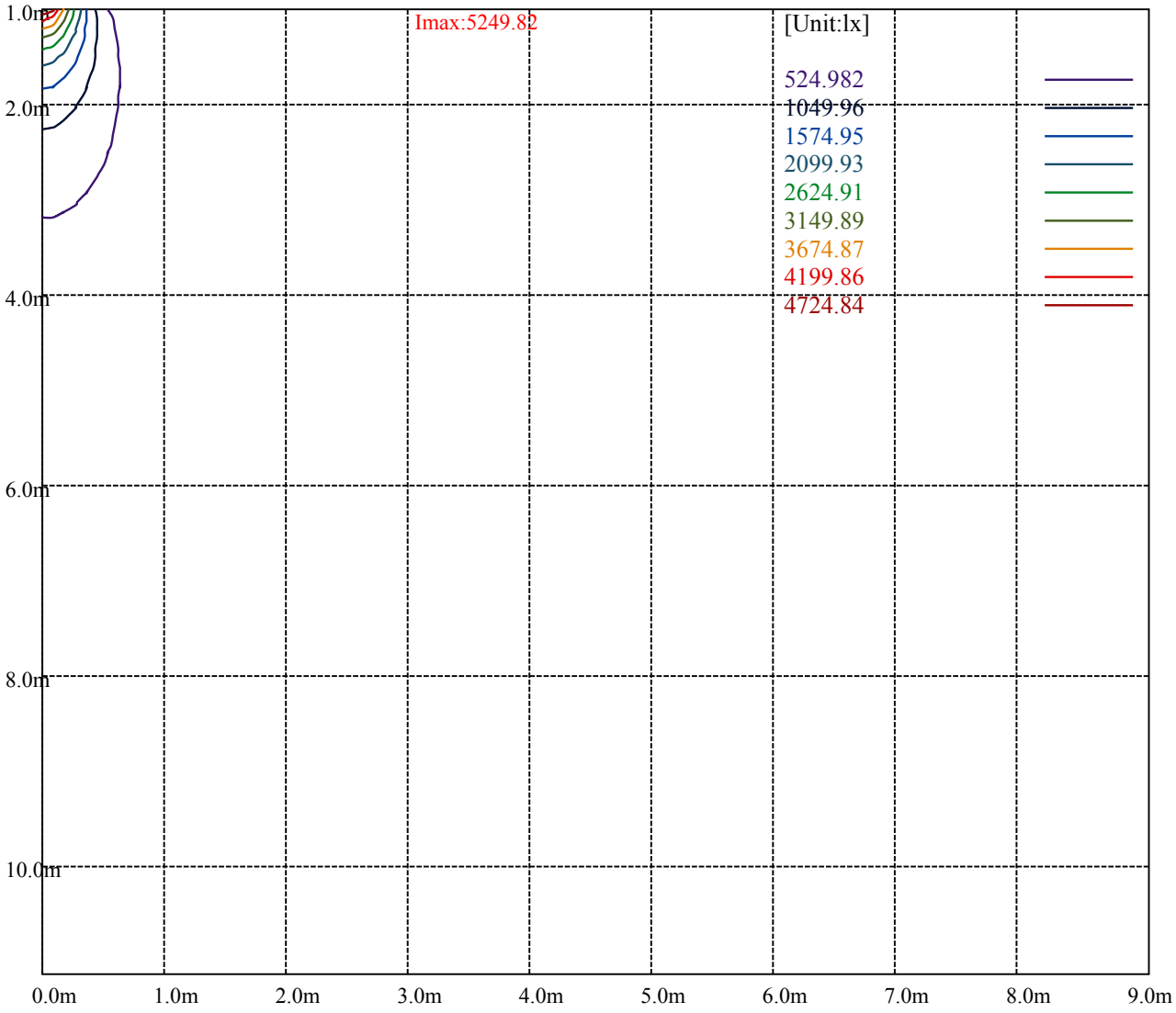
(10%Imax) 524.982
(20%Imax) 1049.96
(30%Imax) 1574.95
(40%Imax) 2099.93
(50%Imax) 2624.91
(60%Imax) 3149.89
(70%Imax) 3674.87
(80%Imax) 4199.86
(90%Imax) 4724.84

Equipment: GMS1980
Temperature(°C): 25.0

Date: 2024/8/6
Humidity(%): 60.0%

Operator: NT07
Distance(m): 7.65

Space ISO Lux diagram



Equipment: GMS1980
Temperature(°C): 25.0

Date: 2024/8/6
Humidity(%): 60.0%

Operator: NT07
Distance(m): 7.65

Luminance Limitting Curve(no luminous side)

Luminance Table

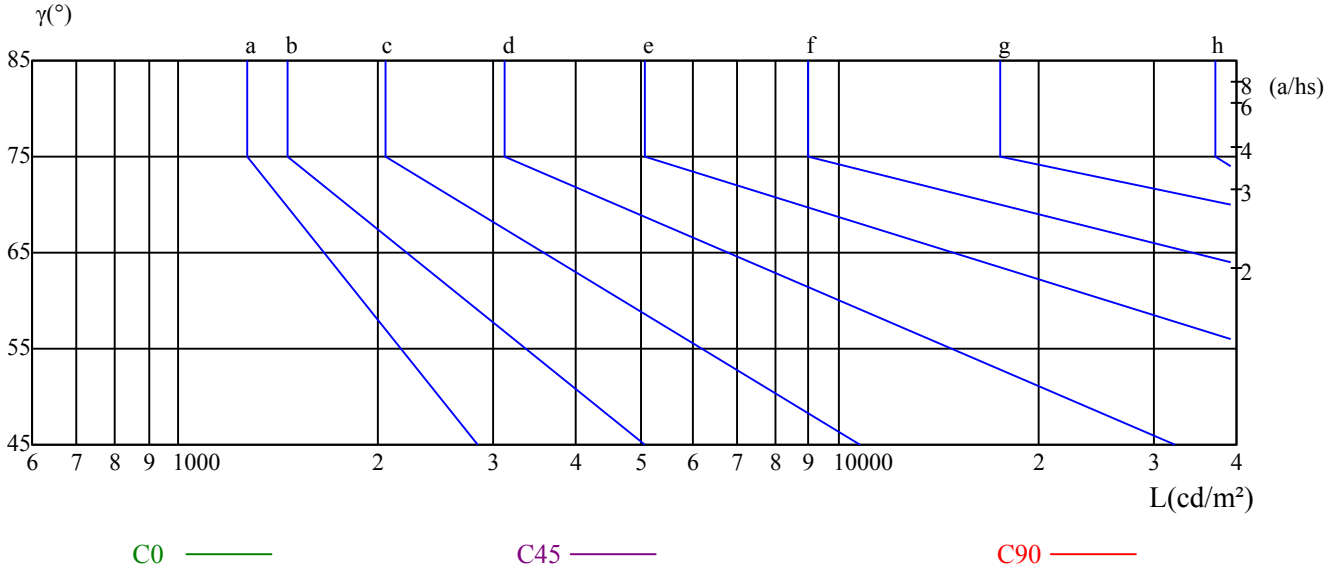
γ	45	50	55	60	65	70	75	80	85
C0	0	0	0	0	0	0	0	0	0
C45	0	0	0	0	0	0	0	0	0
C90	0	0	0	0	0	0	0	0	0

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

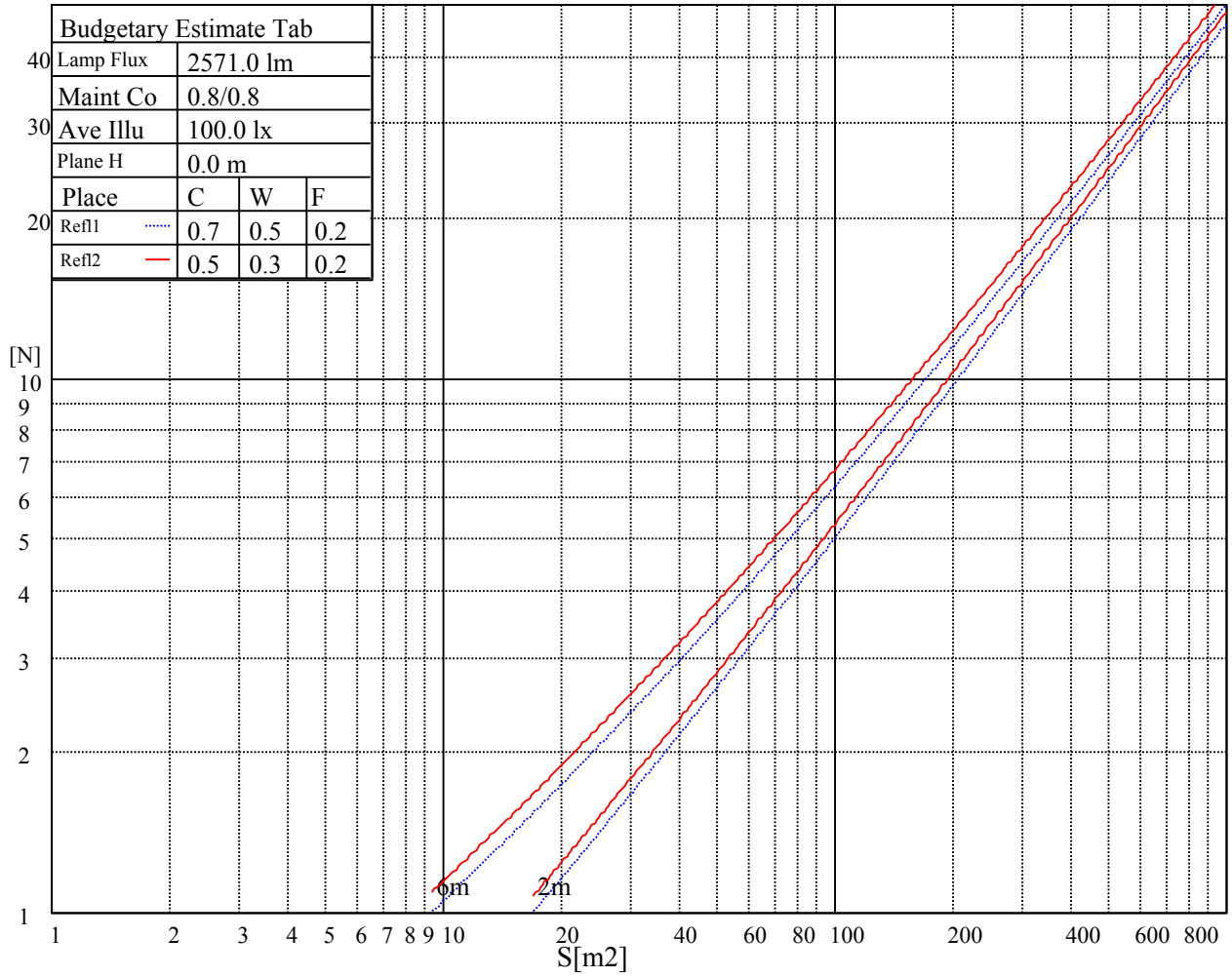
Luminance Limitting Curve



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

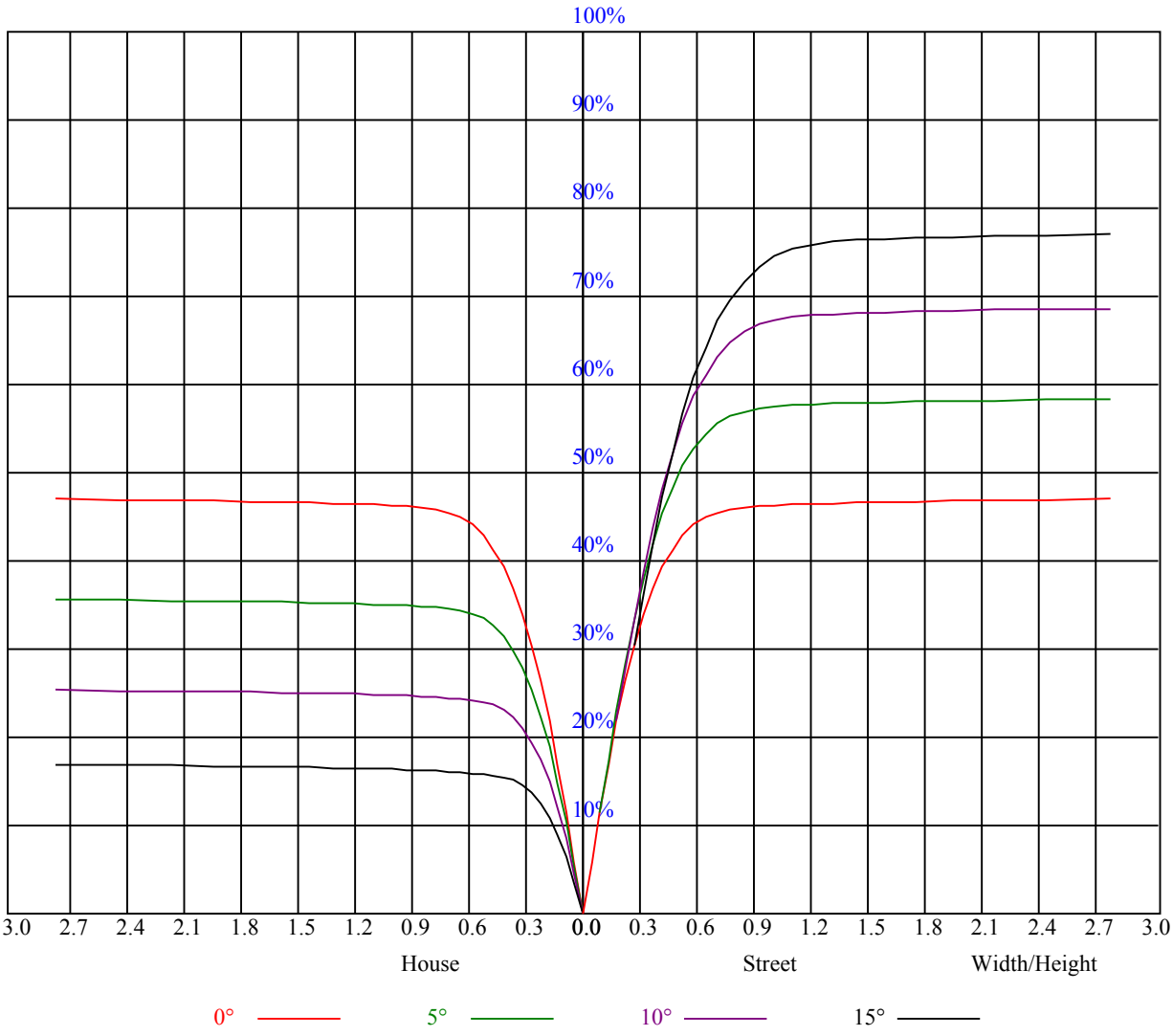


Equipment: GMS1980 Date: 2024/8/6 Operator: NT07
Temperature(°C): 25.0 Humidity(%): 60.0% Distance(m): 7.65

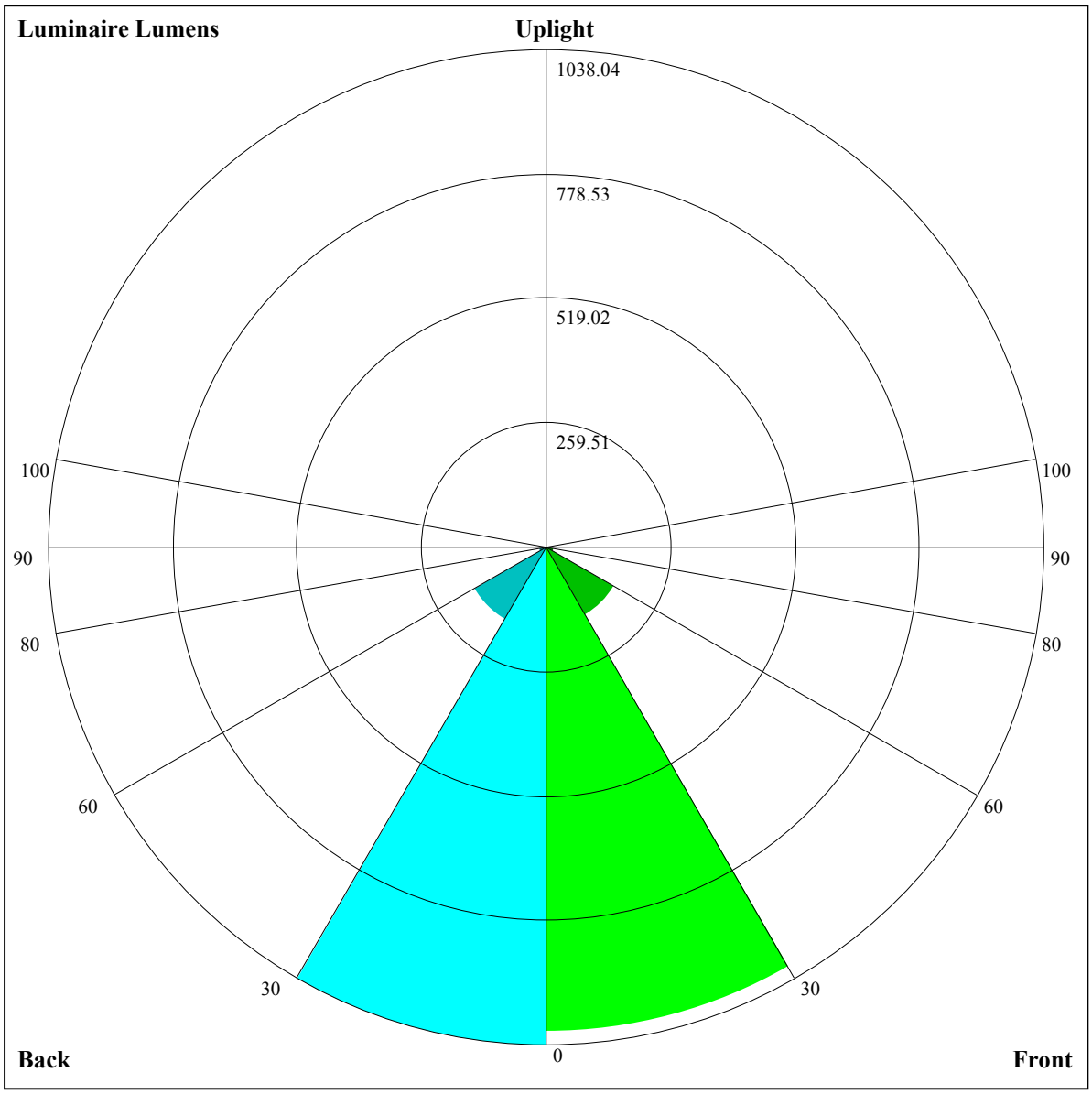
Utilization factor table for indoor luminaire

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	1.13	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	1.05	1.03	1.01	1.03	1.01	0.99	0.99	0.98	0.96	0.96	0.95	0.93	0.93	0.92	0.91	0.89
2	0.99	0.95	0.92	0.97	0.94	0.91	0.94	0.92	0.89	0.91	0.89	0.87	0.89	0.87	0.86	0.84
3	0.93	0.89	0.85	0.92	0.88	0.85	0.89	0.86	0.83	0.87	0.84	0.82	0.85	0.83	0.81	0.80
4	0.88	0.83	0.80	0.87	0.83	0.79	0.85	0.81	0.78	0.83	0.80	0.78	0.82	0.79	0.77	0.75
5	0.84	0.79	0.75	0.83	0.78	0.75	0.81	0.77	0.74	0.80	0.76	0.73	0.78	0.75	0.73	0.72
6	0.79	0.74	0.71	0.79	0.74	0.71	0.77	0.73	0.70	0.76	0.72	0.70	0.75	0.72	0.69	0.68
7	0.76	0.71	0.67	0.75	0.70	0.67	0.74	0.70	0.67	0.73	0.69	0.66	0.72	0.69	0.66	0.65
8	0.72	0.67	0.64	0.72	0.67	0.64	0.71	0.67	0.63	0.70	0.66	0.63	0.69	0.66	0.63	0.62
9	0.69	0.64	0.61	0.69	0.64	0.61	0.68	0.64	0.61	0.67	0.63	0.60	0.66	0.63	0.60	0.59
10	0.66	0.61	0.58	0.66	0.61	0.58	0.65	0.61	0.58	0.64	0.61	0.58	0.64	0.60	0.58	0.57

Coefficient Utilization Curve



Equipment: GMS1980	Date: 2024/8/6	Operator: NT07
Temperature(°C): 25.0	Humidity(%): 60.0%	Distance(m): 7.65



Luminaire Lumens:
FL=1011.07,FM=162.69,FH=17.31,FVH=6.4
BL=1038.04,BM=173.44,BH=17.58,BVH=6.46
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	5240.75	5218.51	5169.35	5102.05	4992.03	4876.15	4749.74	4560.72	4403.29
45.0	5255.38	5248.94	5226.12	5178.71	5107.32	5030.07	4893.12	4757.94	4616.31
90.0	5244.26	5223.78	5170.52	5100.29	5010.17	4898.98	4727.51	4585.30	4423.77
135.0	5258.89	5259.48	5244.84	5200.95	5109.66	5027.73	4929.99	4808.85	4633.87
180.0	5240.75	5250.11	5223.78	5186.32	5130.73	5035.33	4952.82	4836.36	4660.79
225.0	5255.38	5224.36	5180.47	5119.61	5036.50	4946.38	4798.32	4664.89	4511.56
270.0	5244.26	5262.40	5236.65	5195.10	5104.98	5023.04	4908.34	4784.86	4611.63
315.0	5258.89	5219.10	5168.77	5094.44	4975.06	4869.72	4735.70	4540.23	4381.05
360.0	5240.75	5218.51	5169.35	5102.05	4992.03	4876.15	4749.74	4560.72	4403.29

C/γ(°)	9.0	10.0	11.0	12.0	13.0	14.0	15.0	16.0	17.0
0.0	4185.59	4015.87	3847.33	3661.23	3448.79	3279.07	3102.92	2927.35	2719.01
45.0	4420.85	4255.23	4086.68	3862.54	3688.15	3507.90	3327.06	3104.09	2912.14
90.0	4261.67	4048.65	3876.59	3704.53	3523.70	3289.02	3108.77	2872.34	2689.17
135.0	4478.79	4320.77	4111.85	3929.84	3721.50	3544.77	3361.01	3126.33	2947.25
180.0	4513.31	4360.57	4148.13	3977.83	3795.24	3572.86	3403.73	3222.89	3044.98
225.0	4309.07	4142.28	3981.34	3777.10	3610.31	3396.70	3228.16	3044.40	2861.81
270.0	4447.18	4287.42	4130.58	3917.55	3746.67	3574.03	3349.30	3176.07	3004.02
315.0	4209.58	3991.29	3816.31	3640.74	3470.44	3263.86	3100.58	2927.94	2751.79
360.0	4185.59	4015.87	3847.33	3661.23	3448.79	3279.07	3102.92	2927.35	2719.01

C/γ(°)	18.0	19.0	20.0	21.0	22.0	23.0	24.0	25.0	26.0
0.0	2549.30	2393.04	2206.94	2056.54	1918.43	1762.76	1645.13	1536.27	1402.84
45.0	2735.40	2559.83	2353.83	2189.39	2043.66	1863.41	1734.08	1581.92	1468.97
90.0	2515.36	2304.67	2139.64	1985.73	1803.14	1664.44	1547.98	1432.69	1163.72
135.0	2766.42	2586.17	2377.83	2204.60	2045.42	1897.36	1727.06	1598.31	1481.26
180.0	2803.87	2627.13	2460.93	2282.44	2080.53	1926.03	1790.85	1641.03	1532.76
225.0	2675.71	2453.91	2291.21	2138.47	2000.94	1831.81	1707.16	1564.36	1456.68
270.0	2775.20	2608.41	2457.42	2257.27	2098.68	1945.35	1813.67	1656.25	1538.03
315.0	2536.42	2377.24	2217.48	2030.20	1889.75	1732.32	1618.21	1511.69	1403.43
360.0	2549.30	2393.04	2206.94	2056.54	1918.43	1762.76	1645.13	1536.27	1402.84

C/γ(°)	27.0	28.0	29.0	30.0	31.0	32.0	33.0	34.0	35.0
0.0	1139.37	1139.37	1016.36	890.95	773.20	660.48	526.59	430.73	339.20
45.0	1362.46	1229.62	1115.50	999.04	884.33	746.81	639.12	543.15	447.17
90.0	1163.72	1081.73	975.04	839.68	736.56	608.58	509.26	414.81	307.18
135.0	1344.32	1238.98	1134.22	999.04	891.94	781.33	647.90	546.07	448.34
180.0	1396.99	1295.75	1189.24	1042.34	920.62	807.67	695.31	567.14	470.58
225.0	1150.14	1150.14	1089.57	962.34	808.66	691.15	582.71	482.99	369.39
270.0	1432.10	1322.67	1189.24	1074.53	947.54	798.31	683.60	550.76	453.02
315.0	1160.21	1160.21	1043.16	924.36	773.49	655.39	547.07	448.34	336.45
360.0	1139.37	1139.37	1016.36	890.95	773.20	660.48	526.59	430.73	339.20

C/γ(°)	36.0	37.0	38.0	39.0	40.0	41.0	42.0	43.0	44.0
0.0	256.86	174.51	127.46	100.19	84.62	74.97	64.49	59.34	54.66
45.0	336.56	295.01	295.01	126.35	92.64	81.87	70.29	63.03	58.05
90.0	230.05	167.55	119.91	88.25	77.37	68.76	61.16	55.19	50.62
135.0	357.63	313.74	313.74	127.58	93.58	75.14	66.42	59.17	53.43
180.0	381.04	296.77	296.77	141.39	103.76	84.39	72.86	64.55	57.35
225.0	290.15	219.75	160.88	107.92	86.15	75.67	64.73	57.70	51.68
270.0	361.73	300.86	300.86	138.93	103.06	79.36	69.82	62.09	55.42
315.0	256.27	177.21	129.74	98.90	79.59	70.11	62.15	55.13	50.86
360.0	256.86	174.51	127.46	100.19	84.62	74.97	64.49	59.34	54.66

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	50.33	45.41	42.08	39.27	36.81	34.18	32.48	31.08	29.61
45.0	52.44	48.57	44.83	41.67	38.39	35.93	33.83	32.01	30.14
90.0	46.82	42.37	39.39	36.75	33.94	32.01	30.37	28.62	27.33
135.0	49.28	44.59	41.02	37.75	35.11	32.25	30.26	28.79	27.56
180.0	52.85	48.75	44.30	40.91	38.10	35.58	33.12	31.49	30.02
225.0	47.29	43.54	40.09	36.11	33.47	31.08	28.97	26.80	25.52
270.0	49.22	45.18	41.55	38.16	34.41	31.89	29.09	27.27	25.75
315.0	46.94	43.19	38.92	36.11	33.53	31.43	29.38	27.92	26.63
360.0	50.33	45.41	42.08	39.27	36.81	34.18	32.48	31.08	29.61

C/γ(°)	54.0	55.0	56.0	57.0	58.0	59.0	60.0	61.0	62.0
0.0	28.15	27.10	25.93	25.05	24.29	23.53	22.94	22.30	21.65
45.0	28.91	27.92	26.69	25.81	24.70	23.88	23.06	22.41	21.59
90.0	26.28	25.34	24.29	23.47	22.71	22.12	21.42	20.89	20.37
135.0	26.04	24.99	24.11	23.35	22.53	22.00	21.42	21.01	20.54
180.0	28.79	27.51	26.63	25.81	24.93	24.35	23.82	23.17	22.71
225.0	24.46	23.64	22.82	22.24	21.77	21.54	21.19	20.95	20.78
270.0	24.23	23.17	22.41	21.65	20.89	20.37	19.96	19.90	19.66
315.0	25.28	24.23	23.12	22.36	21.77	21.36	20.89	20.54	20.01
360.0	28.15	27.10	25.93	25.05	24.29	23.53	22.94	22.30	21.65

C/γ(°)	63.0	64.0	65.0	66.0	67.0	68.0	69.0	70.0	71.0
0.0	20.89	20.25	19.61	18.96	18.26	17.79	17.26	16.80	16.50
45.0	21.07	20.48	19.84	19.02	18.43	17.85	17.15	16.62	16.27
90.0	19.66	19.08	18.55	17.91	17.44	16.85	16.44	16.15	15.80
135.0	19.96	19.55	19.08	18.49	18.08	17.62	17.21	16.74	16.39
180.0	22.00	21.48	20.89	20.31	19.66	19.02	18.49	17.85	17.26
225.0	20.54	20.25	19.66	19.14	18.55	18.08	17.44	17.09	16.62
270.0	19.37	19.20	18.90	18.67	18.43	18.20	17.97	17.67	17.32
315.0	19.55	18.96	18.49	18.02	17.62	17.21	16.91	16.39	16.09
360.0	20.89	20.25	19.61	18.96	18.26	17.79	17.26	16.80	16.50

C/γ(°)	72.0	73.0	74.0	75.0	76.0	77.0	78.0	79.0	80.0
0.0	16.15	15.74	15.45	15.16	14.75	14.46	14.16	13.75	13.46
45.0	15.86	15.51	15.16	14.86	14.57	14.22	13.93	13.58	13.28
90.0	15.39	15.10	14.81	14.51	14.16	13.87	13.58	13.23	12.82
135.0	16.09	15.74	15.27	14.98	14.69	14.34	13.99	13.69	13.40
180.0	16.85	16.50	16.09	15.74	15.45	15.04	14.75	14.46	14.05
225.0	16.15	15.80	15.33	14.86	14.57	14.10	13.75	13.52	13.17
270.0	16.50	15.80	15.33	14.92	14.57	14.28	13.99	13.64	13.34
315.0	15.68	15.22	14.86	14.46	14.10	13.69	13.46	13.17	12.82
360.0	16.15	15.74	15.45	15.16	14.75	14.46	14.16	13.75	13.46

C/γ(°)	81.0	82.0	83.0	84.0	85.0	86.0	87.0	88.0	89.0
0.0	13.17	12.82	12.58	12.29	12.11	11.70	11.41	11.12	10.83
45.0	12.93	12.64	12.35	12.11	11.82	11.53	11.12	10.94	10.77
90.0	12.58	12.29	12.06	11.82	11.53	11.00	10.83	10.71	10.59
135.0	13.05	12.70	12.47	12.17	11.94	11.65	11.00	10.77	10.65
180.0	13.69	13.34	13.05	12.82	12.52	12.00	11.41	11.29	11.35
225.0	12.82	12.47	12.23	11.94	11.59	11.18	11.00	10.71	10.65
270.0	12.93	12.70	12.29	12.06	11.82	11.35	11.06	10.89	10.65
315.0	12.47	12.23	11.94	11.70	11.41	11.06	10.83	10.71	10.53
360.0	13.17	12.82	12.58	12.29	12.11	11.70	11.41	11.12	10.83

Intensity data(cd)

C/γ(°)	90.0
0.0	10.71
45.0	10.65
90.0	10.59
135.0	10.53
180.0	10.59
225.0	10.53
270.0	10.48
315.0	10.53
360.0	10.71