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

NATA

LumCAT: 3-1934-E
Luminaire: 99.02.73.181
Report No: NATA0100
Test No: GC2019022804
LampCAT: LUMILEDS LUXEON 1208
Lamp flux(lm): 2968.0
Number of Lamps: 1
Length(mm): 86
Phm Type: C

Voltage(V): 34.9400
Current(A): 0.7000
Power (W): 24.4600
PF: 1.0000
Ballast type: DC
Width(mm): 86
Height(mm): 0

Photometric Results

Lumens(lm): 2673.81
Efficiency(%): 90.09%
Lumens(lm)/Power(W): 109.50
Central intensity(cd): 19846.410
Maximum intensity(cd): 19846.410
Angle of maximum intensity: C=0.0 γ=0.0
Beam Angle(50%Imax): [C0/180]Total=15.8
[C90/270]Total=15.8
Field angle(10%Imax): [C0/180]Total=32.3
[C90/270]Total=32.3
Maximum s/h(1/2): C0_180=0.27 C90_270=0.27
Maximum s/h(1/4): C0_180=0.27 C90_270=0.27
Up flux rate of lamp(%): 0.00%
Down flux rate of lamp(%): 90.24%
Up flux rate of LUM(%): - -
Down flux rate of LUM(%): 100.00%
CIE Type : Direct lighting
Output flux ratio in π solid angle : 98.561%

Equipment: GMS1980
Temperature(°C): 10.0
Date: 2019/2/28
Humidity(%): 65.0%
Operator: NT07
Distance(m): 7.50

Zonal flux distribution table

γ(°)	Average I(cd)	Zonal F(lm)	Sum F(lm)	Eff Flux(%)	Eff Sum(%)
0.0	19846.406	4.748	4.748	.160%	.178%
1.0	19654.453	37.616	42.364	1.267%	1.584%
2.0	19114.453	73.153	115.517	2.465%	4.320%
3.0	18106.875	103.919	219.436	3.501%	8.207%
4.0	16755.469	128.172	347.608	4.318%	13.000%
5.0	15254.297	145.794	493.402	4.912%	18.453%
6.0	13191.188	151.206	644.608	5.095%	24.108%
7.0	11374.734	152.015	796.624	5.122%	29.794%
8.0	9782.227	149.295	945.919	5.030%	35.377%
9.0	7973.438	136.782	1082.701	4.609%	40.493%
10.0	6422.977	122.309	1205.01	4.121%	45.067%
11.0	5237.367	109.588	1314.598	3.692%	49.166%
12.0	4191.398	95.563	1410.161	3.220%	52.740%
13.0	3308.063	81.604	1491.765	2.749%	55.792%
14.0	2839.430	75.328	1567.094	2.538%	58.609%
15.0	2300.977	65.307	1632.401	2.200%	61.052%
16.0	2030.273	61.368	1693.769	2.068%	63.347%
17.0	1742.484	55.867	1749.636	1.882%	65.436%
18.0	1573.102	53.308	1802.944	1.796%	67.430%
19.0	1449.984	51.767	1854.711	1.744%	69.366%
20.0	1353.797	50.776	1905.487	1.711%	71.265%
21.0	1283.414	50.437	1955.924	1.699%	73.151%
22.0	1230.750	50.559	2006.483	1.703%	75.042%
23.0	1189.385	50.963	2057.445	1.717%	76.948%
24.0	1153.645	51.456	2108.902	1.734%	78.873%
25.0	1119.670	51.891	2160.792	1.748%	80.813%
26.0	1097.866	52.777	2213.569	1.778%	82.787%
27.0	1069.896	53.265	2266.834	1.795%	84.779%
28.0	1033.439	53.204	2320.038	1.793%	86.769%
29.0	984.326	52.331	2372.369	1.763%	88.726%
30.0	912.185	50.016	2422.385	1.685%	90.597%
31.0	811.266	45.820	2468.205	1.544%	92.311%
32.0	679.950	39.513	2507.718	1.331%	93.788%
33.0	555.532	33.179	2540.897	1.118%	95.029%
34.0	429.567	26.342	2567.239	.888%	96.014%
35.0	304.594	19.159	2586.398	.646%	96.731%
36.0	198.295	12.782	2599.179	.431%	97.209%
37.0	129.473	8.545	2607.724	.288%	97.529%

Zonal flux distribution table

γ(°)	Average I(cd)	Zonal F(lm)	Sum F(lm)	Eff Flux(%)	Eff Sum(%)
38.0	60.813	4.106	2611.83	.138%	97.682%
39.0	37.020	2.555	2614.384	.086%	97.778%
40.0	27.359	1.928	2616.313	.065%	97.850%
41.0	21.087	1.517	2617.83	.051%	97.906%
42.0	17.979	1.319	2619.149	.044%	97.956%
43.0	16.952	1.268	2620.417	.043%	98.003%
44.0	16.305	1.242	2621.659	.042%	98.050%
45.0	15.891	1.232	2622.891	.042%	98.096%
46.0	15.405	1.215	2624.106	.041%	98.141%
47.0	14.927	1.197	2625.304	.040%	98.186%
48.0	14.421	1.175	2626.479	.040%	98.230%
49.0	13.943	1.154	2627.633	.039%	98.273%
50.0	13.514	1.135	2628.768	.038%	98.316%
51.0	13.170	1.122	2629.89	.038%	98.358%
52.0	12.909	1.116	2631.006	.038%	98.399%
53.0	12.656	1.108	2632.114	.037%	98.441%
54.0	12.452	1.105	2633.219	.037%	98.482%
55.0	12.284	1.103	2634.323	.037%	98.523%
56.0	12.171	1.107	2635.429	.037%	98.565%
57.0	12.066	1.110	2636.539	.037%	98.606%
58.0	12.009	1.117	2637.656	.038%	98.648%
59.0	11.967	1.125	2638.78	.038%	98.690%
60.0	11.904	1.131	2639.911	.038%	98.732%
61.0	11.883	1.140	2641.051	.038%	98.775%
62.0	11.862	1.149	2642.199	.039%	98.818%
63.0	11.805	1.153	2643.353	.039%	98.861%
64.0	11.770	1.160	2644.513	.039%	98.904%
65.0	11.686	1.161	2645.674	.039%	98.948%
66.0	11.609	1.163	2646.837	.039%	98.991%
67.0	11.531	1.164	2648.001	.039%	99.035%
68.0	11.419	1.161	2649.162	.039%	99.078%
69.0	11.320	1.159	2650.321	.039%	99.122%
70.0	11.243	1.159	2651.48	.039%	99.165%
71.0	11.138	1.155	2652.634	.039%	99.208%
72.0	11.046	1.152	2653.786	.039%	99.251%
73.0	10.969	1.150	2654.937	.039%	99.294%
74.0	10.934	1.153	2656.089	.039%	99.337%
75.0	10.870	1.151	2657.241	.039%	99.380%

Zonal flux distribution table

γ(°)	Average I(cd)	Zonal F(lm)	Sum F(lm)	Eff Flux(%)	Eff Sum(%)
76.0	10.814	1.151	2658.391	.039%	99.423%
77.0	10.786	1.152	2659.544	.039%	99.467%
78.0	10.737	1.152	2660.696	.039%	99.510%
79.0	10.680	1.150	2661.845	.039%	99.553%
80.0	10.624	1.147	2662.993	.039%	99.596%
81.0	10.603	1.148	2664.141	.039%	99.639%
82.0	10.568	1.148	2665.289	.039%	99.681%
83.0	10.519	1.145	2666.434	.039%	99.724%
84.0	10.498	1.145	2667.578	.039%	99.767%
85.0	10.448	1.141	2668.72	.038%	99.810%
86.0	10.441	1.142	2669.862	.038%	99.852%
87.0	10.371	1.136	2670.998	.038%	99.895%
88.0	10.287	1.127	2672.125	.038%	99.937%
89.0	10.238	1.122	2673.248	.038%	99.979%
90.0	10.195	0.559	2673.807	.019%	100.000%

Zonal flux distribution table

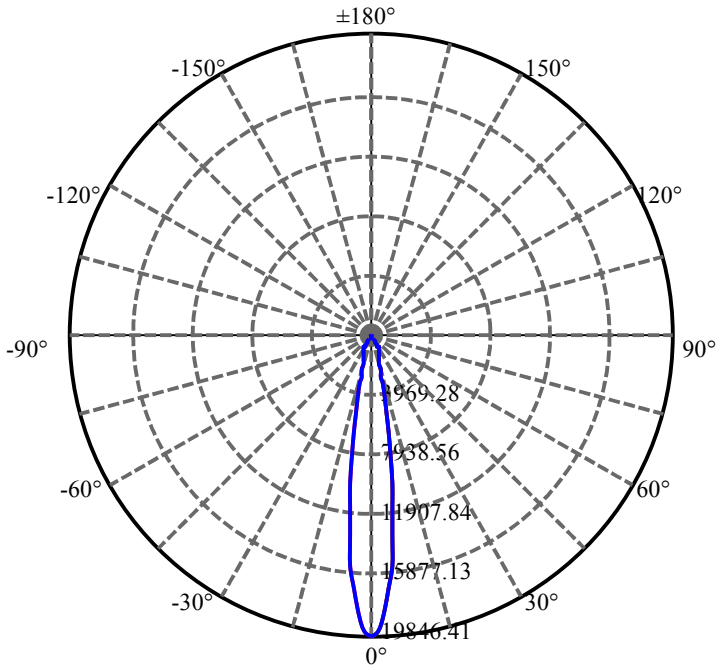
ZONAL LUMEN SUMMARY

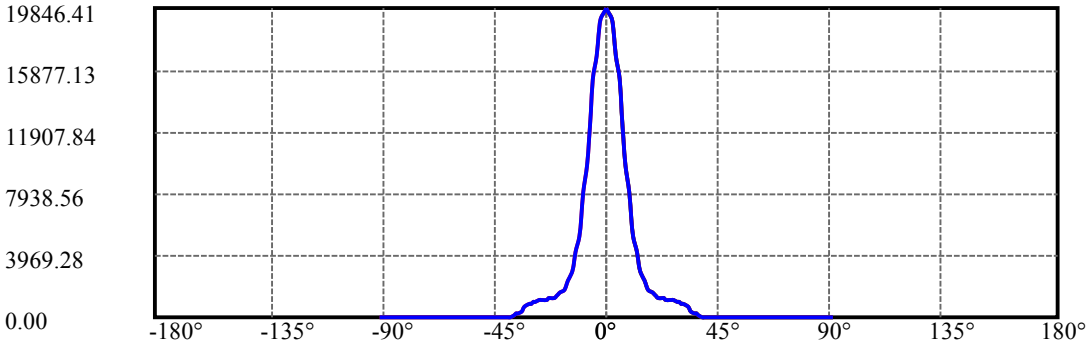
Zone	Lumens	%Lamp	%Fixt
0-30	2422.38	81.62%	90.60%
0-40	2616.31	88.15%	97.85%
0-60	2639.91	88.95%	98.73%
0-90	2673.25	90.07%	99.98%
0-120	2673.25	90.07%	99.98%
0-180	2673.81	90.09%	100.00%
60-90	34.47	1.16%	1.29%
90-120	0.00	0.00%	0.00%
90-130	0.00	0.00%	0.00%
90-150	0.00	0.00%	0.00%
90-180	0.00	0.00%	0.00%
0-24.58	2139.05	72.07%	80.00%

ZONAL LUMEN SUMMARY

0-10	1205.01
10-20	700.48
20-30	516.90
30-40	193.93
40-50	12.46
50-60	11.14
60-70	11.57
70-80	11.51
80-90	10.26
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:16.2 Right:16.2
:C90/270Left:16.2 Right:16.2

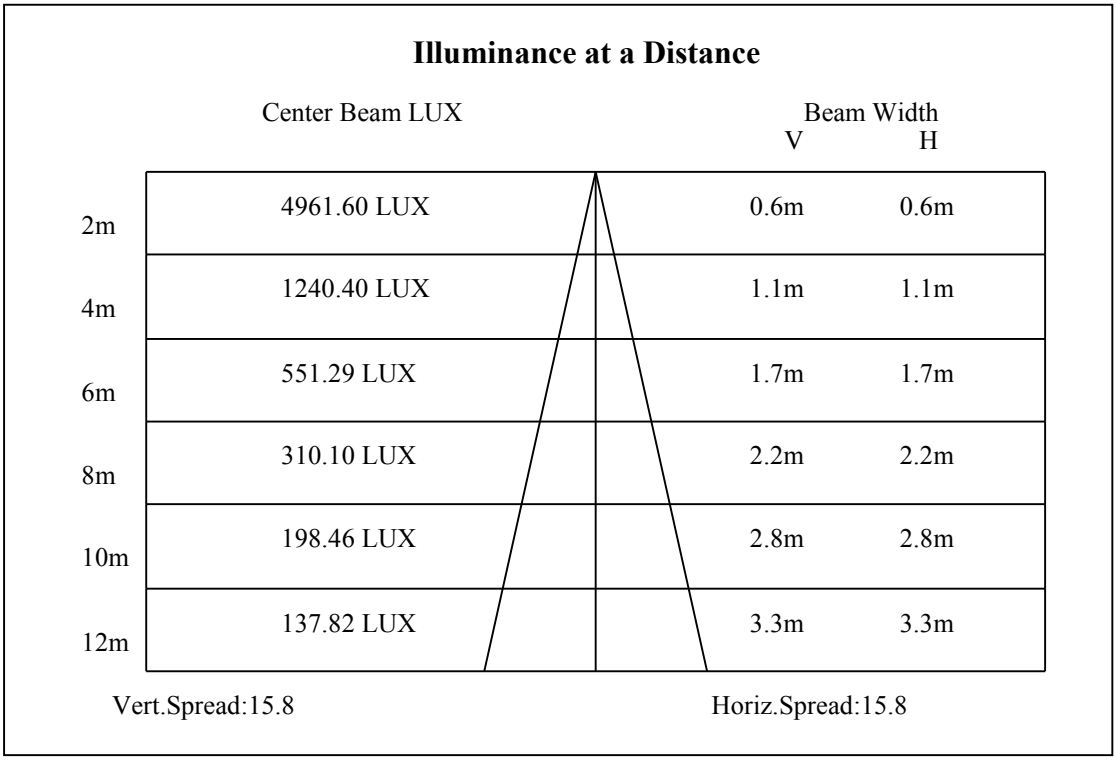
Beam Angle(50%Imax):C0/180Left:7.9 Right:7.9
:C90/270Left:7.9 Right:7.9

Equipment: GMS1980
Temperature(°C): 10.0

Date: 2019/2/28
Humidity(%): 65.0%

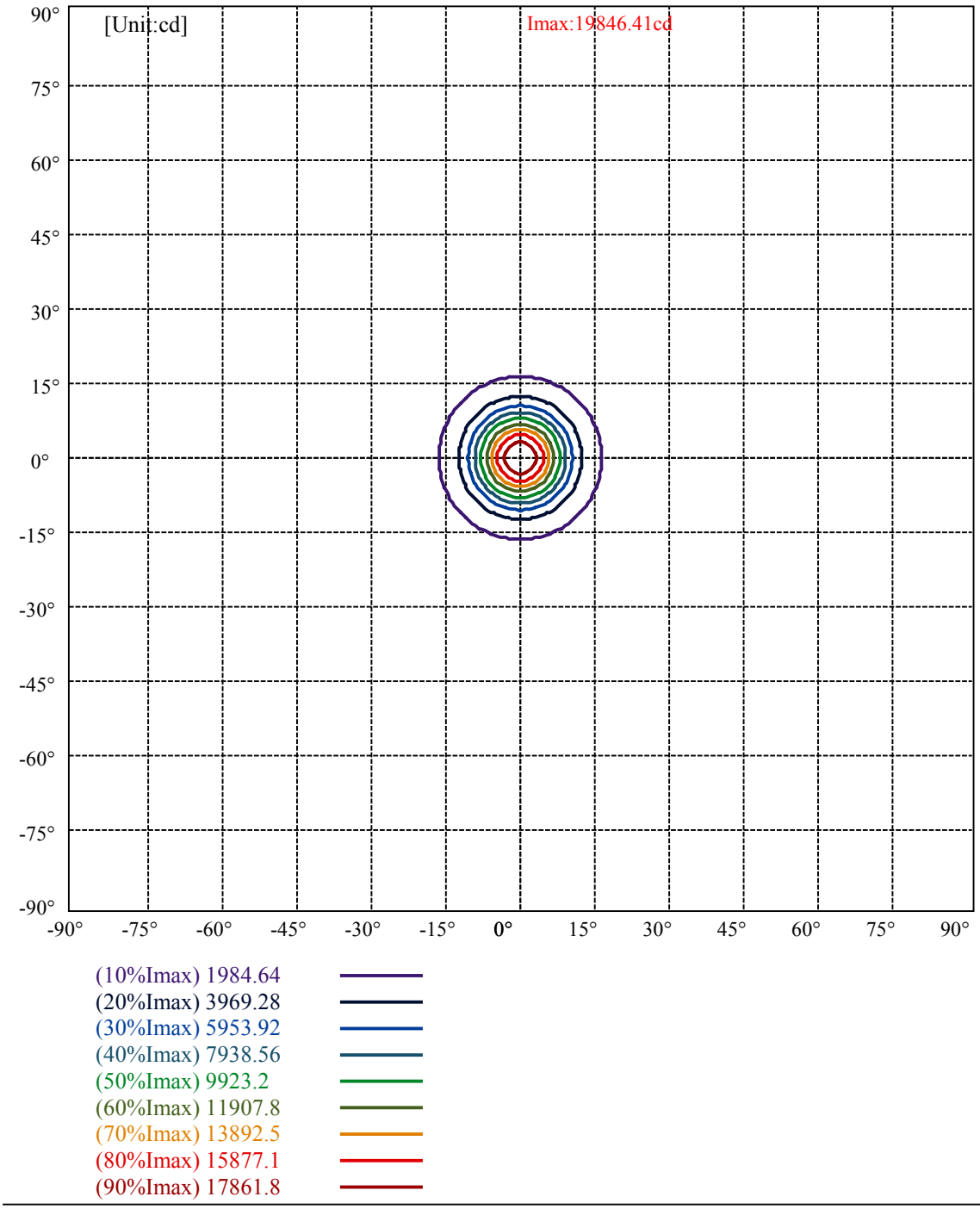
Operator: NT07
Distance(m): 7.50

Lux distance Curve



Equipment: GMS1980 Date: 2019/2/28 Operator: NT07
Temperature(°C): 10.0 Humidity(%): 65.0% Distance(m): 7.50

ISO-Intensity(V-H)

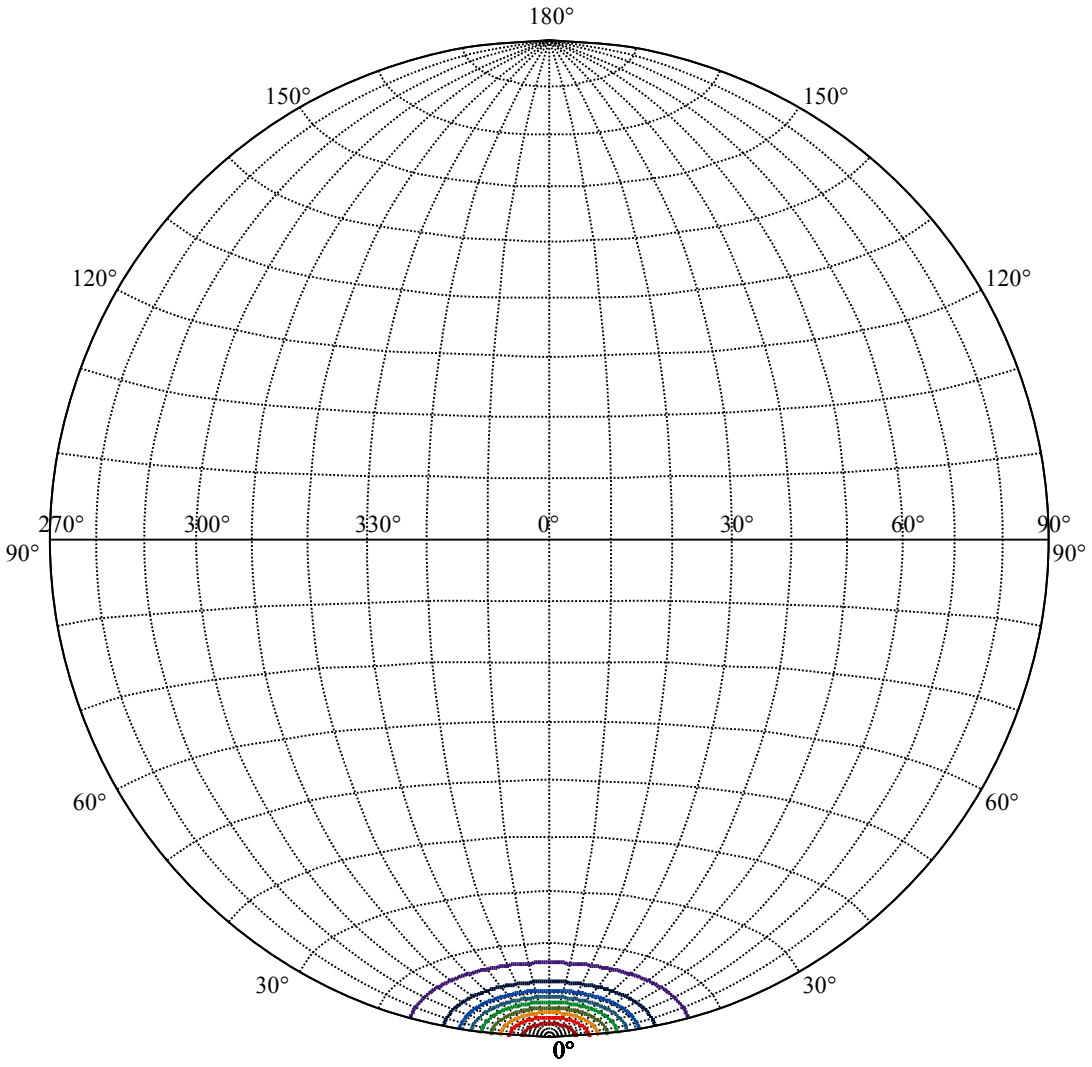


Equipment: GMS1980
Temperature(°C): 10.0

Date: 2019/2/28
Humidity(%): 65.0%

Operator: NT07
Distance(m): 7.50

ISO candela diagram on circular web



House [Unit:cd] Road

Imax:19846.41

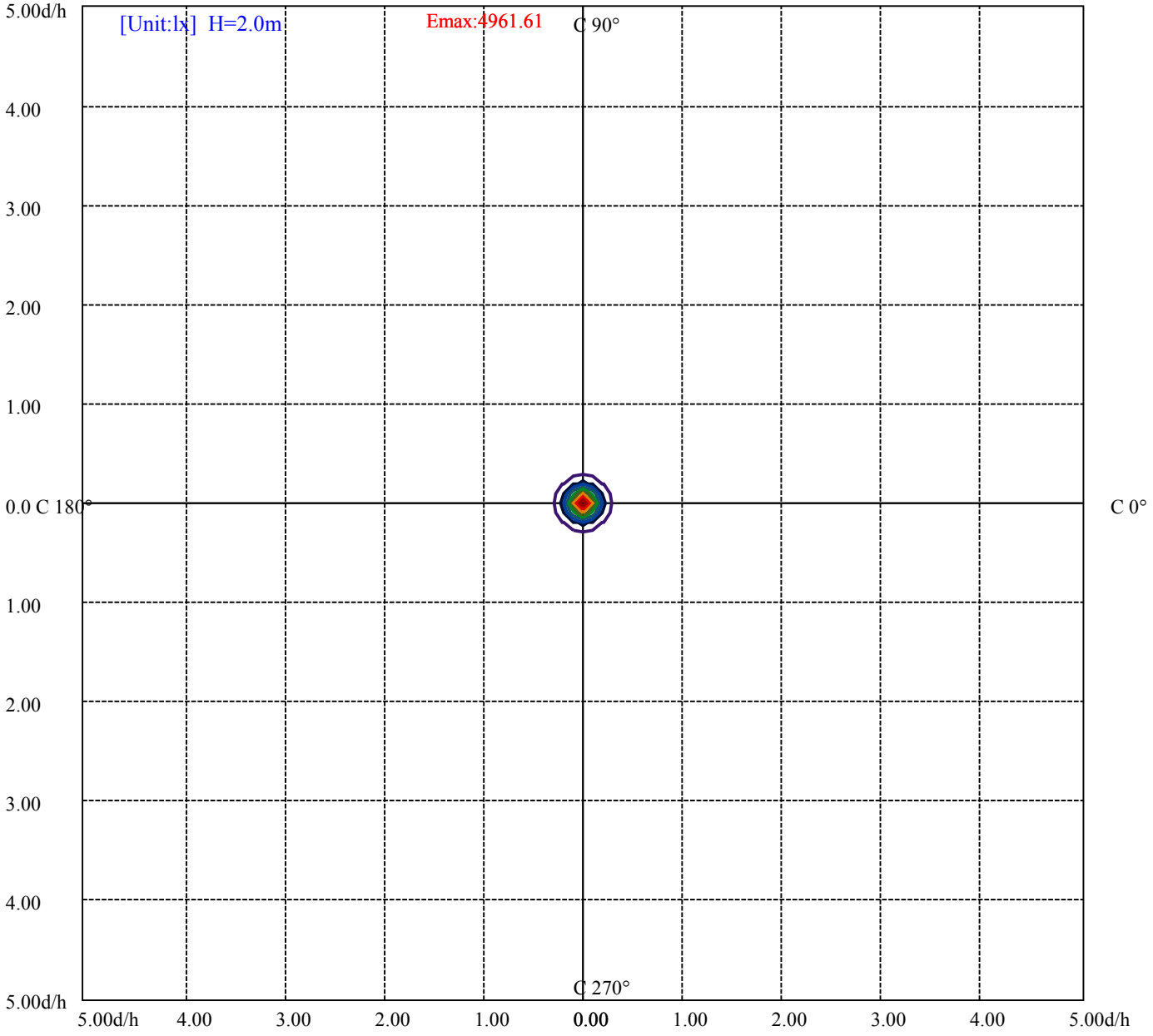
(10%Imax) 1984.64
(20%Imax) 3969.28
(30%Imax) 5953.92
(40%Imax) 7938.56
(50%Imax) 9923.2
(60%Imax) 11907.8
(70%Imax) 13892.5
(80%Imax) 15877.1
(90%Imax) 17861.8

Equipment: GMS1980
Temperature(°C): 10.0

Date: 2019/2/28
Humidity(%): 65.0%

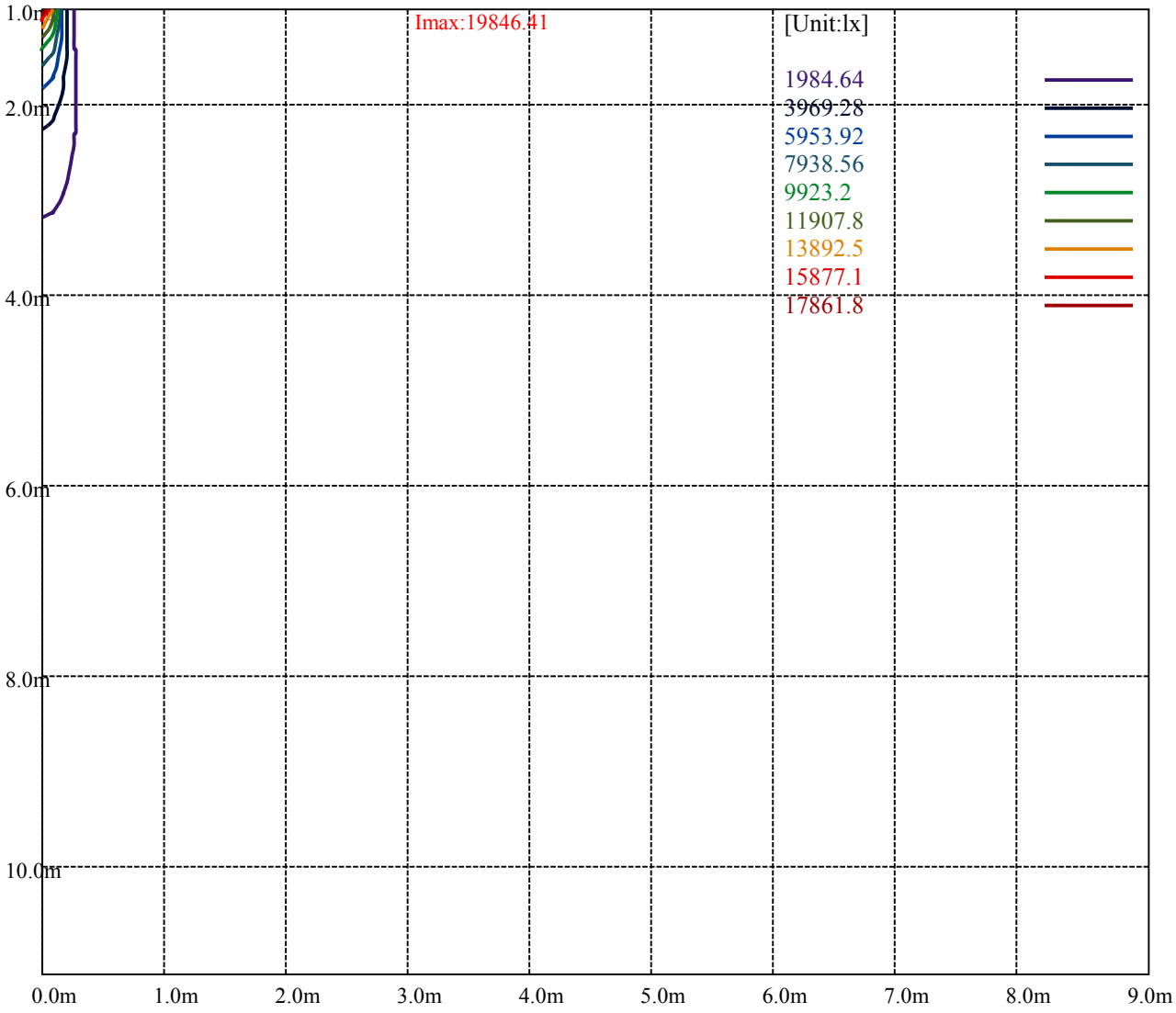
Operator: NT07
Distance(m): 7.50

ISO illuminance diagram



Equipment: GMS1980	Date: 2019/2/28	Operator: NT07
Temperature(°C): 10.0	Humidity(%): 65.0%	Distance(m): 7.50

Space ISO Lux diagram



Equipment: GMS1980
Temperature(°C): 10.0

Date: 2019/2/28
Humidity(%): 65.0%

Operator: NT07
Distance(m): 7.50

Luminance Limitting Curve(no luminous side)

Luminance Table

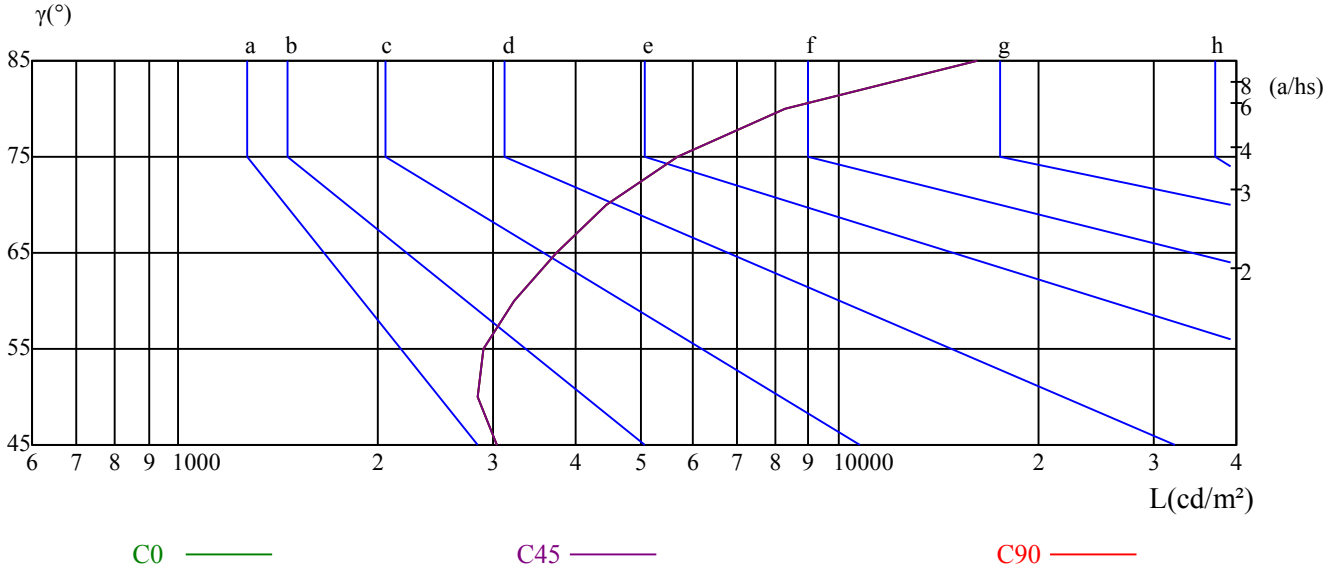
γ	45	50	55	60	65	70	75	80	85
C0	3038	2843	2896	3219	3739	4445	5679	8272	16209
C45	3038	2843	2896	3219	3739	4445	5679	8272	16209
C90	3038	2843	2896	3219	3739	4445	5679	8272	16209

L(Hor)(65)	L(Ver)(65)	L45(65)	L(Hor)(75)	L(Ver)(75)	L45(75)	L(Hor)(85)	L(Ver)(85)	L45(85)
3739	3739	3739	5679	5679	5679	16209	16209	16209

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

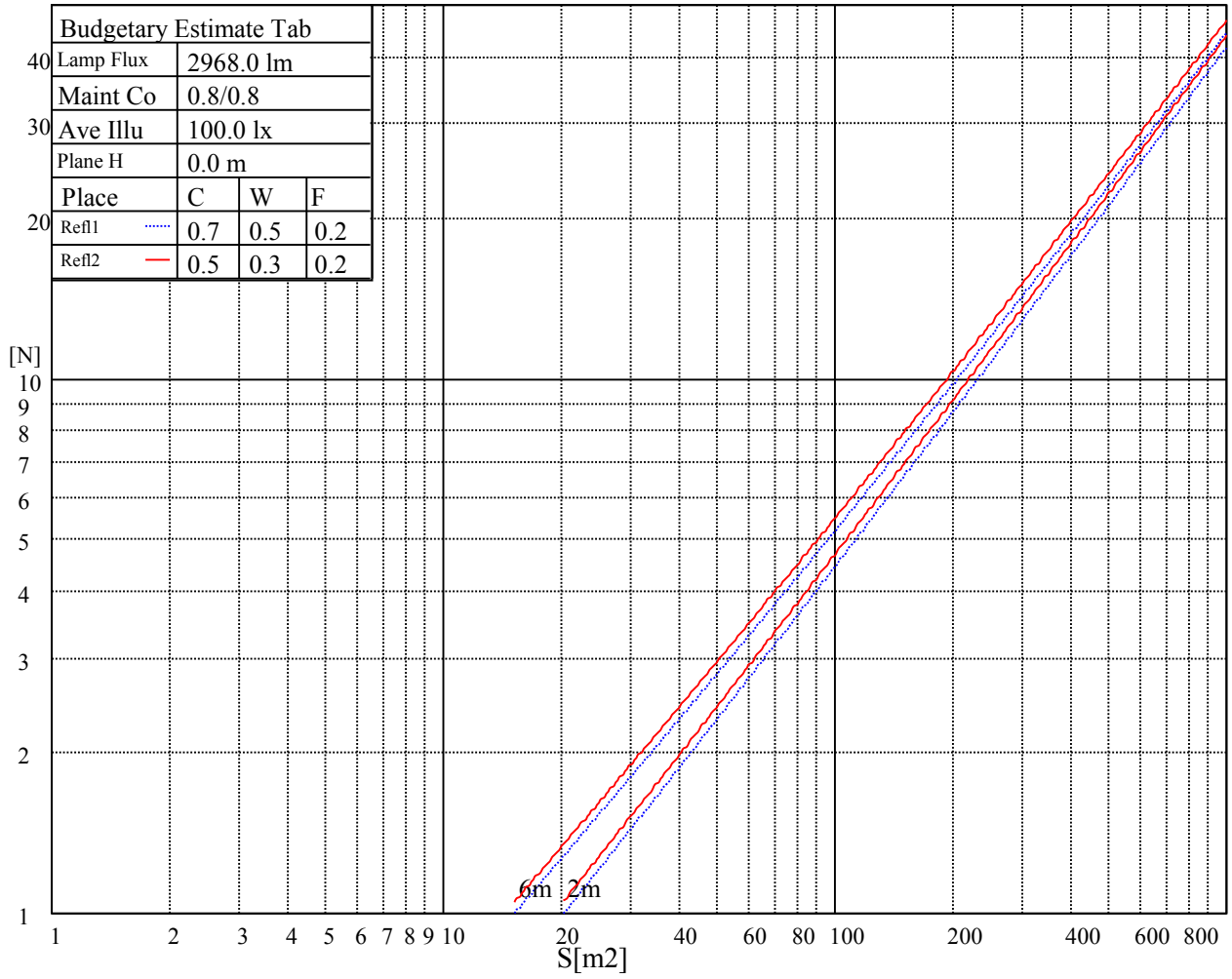


UGR Glare

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	1.25	2.16	1.62	2.47	2.79	0.90	1.81	1.27	2.12	2.44
	3H	4.36	5.16	4.75	5.50	5.87	4.28	5.08	4.66	5.42	5.78
	4H	6.04	6.78	6.45	7.14	7.53	6.00	6.74	6.41	7.09	7.48
	6H	7.93	8.61	8.35	8.99	9.39	7.90	8.58	8.32	8.96	9.35
	8H	8.98	9.61	9.42	10.01	10.42	8.97	9.60	9.40	9.99	10.40
	12H	10.68	11.28	11.11	11.67	12.10	10.70	11.31	11.14	11.69	12.13
4H	2H	2.16	2.90	2.56	3.25	3.64	1.91	2.65	2.32	3.01	3.40
	3H	5.50	6.10	5.91	6.51	6.92	5.45	6.06	5.87	6.47	6.87
	4H	7.34	7.89	7.78	8.31	8.76	7.31	7.86	7.75	8.28	8.73
	6H	9.37	9.84	9.84	10.29	10.76	9.36	9.82	9.83	10.28	10.75
	8H	10.52	10.95	11.00	11.40	11.88	10.52	10.95	11.00	11.41	11.88
	12H	12.13	12.50	12.62	12.99	13.47	12.16	12.53	12.66	13.02	13.50
8H	4H	8.04	8.47	8.52	8.92	9.40	8.01	8.45	8.49	8.90	9.37
	6H	10.35	10.69	10.86	11.19	11.68	10.34	10.68	10.85	11.18	11.67
	8H	11.69	11.99	12.23	12.51	13.01	11.69	11.99	12.23	12.51	13.01
	12H	13.45	13.71	13.98	14.21	14.79	13.48	13.74	14.00	14.24	14.82
12H	4H	8.23	8.60	8.73	9.09	9.57	8.21	8.58	8.70	9.07	9.55
	6H	10.85	10.96	11.19	11.43	11.98	10.84	10.95	11.18	11.42	11.97
	8H	12.13	12.38	12.65	12.88	13.47	12.13	12.39	12.65	12.89	13.47

Variation with the observer position at spacings:		
S = 1.0H	5.9/-5.7	5.9/-5.7
S = 1.5H	7.7/-3.9	7.7/-3.9
S = 2.0H	8.7/-2.8	8.7/-2.8
Standard tables:	BK4	BK4
Uncorrected UGR	-0.9	-0.9

Budgetary Estimate Table

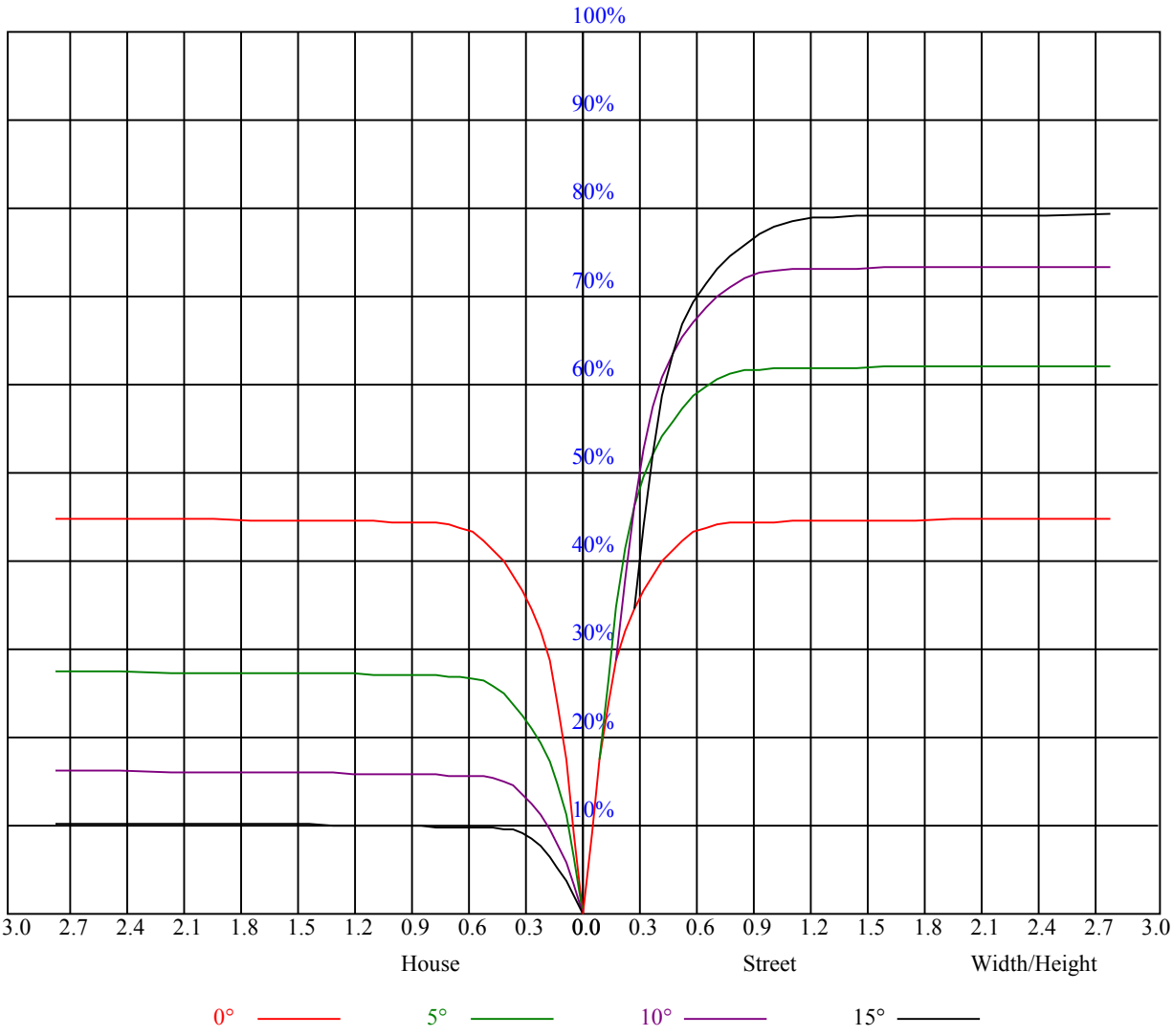


Equipment: GMS1980 Date: 2019/2/28 Operator: NT07
Temperature(°C): 10.0 Humidity(%): 65.0% Distance(m): 7.50

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	1.00	0.98	0.99	0.98	0.96	0.96	0.95	0.93	0.93	0.92	0.91	0.89	0.89	0.88	0.86
2	0.97	0.94	0.91	0.95	0.92	0.90	0.92	0.90	0.88	0.90	0.88	0.86	0.87	0.86	0.85	0.83
3	0.92	0.89	0.86	0.91	0.88	0.86	0.89	0.86	0.84	0.87	0.85	0.83	0.85	0.83	0.82	0.81
4	0.89	0.85	0.82	0.88	0.84	0.82	0.86	0.83	0.81	0.84	0.82	0.80	0.83	0.81	0.79	0.78
5	0.85	0.82	0.79	0.85	0.81	0.79	0.83	0.80	0.78	0.82	0.79	0.77	0.81	0.78	0.77	0.76
6	0.83	0.79	0.76	0.82	0.78	0.76	0.81	0.78	0.75	0.80	0.77	0.75	0.79	0.76	0.74	0.73
7	0.80	0.76	0.74	0.79	0.76	0.73	0.78	0.75	0.73	0.78	0.75	0.73	0.77	0.74	0.72	0.71
8	0.78	0.74	0.71	0.77	0.74	0.71	0.76	0.73	0.71	0.76	0.73	0.71	0.75	0.72	0.70	0.69
9	0.75	0.72	0.69	0.75	0.72	0.69	0.74	0.71	0.69	0.74	0.71	0.69	0.73	0.71	0.69	0.68
10	0.74	0.70	0.68	0.73	0.70	0.67	0.73	0.69	0.67	0.72	0.69	0.67	0.71	0.69	0.67	0.66

Coefficient Utilization Curve



Equipment: GMS1980	Date: 2019/2/28	Operator: NT07
Temperature(°C): 10.0	Humidity(%): 65.0%	Distance(m): 7.50

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	19771.88	19845.00	19558.13	18877.50	17926.88	16683.75	14838.75	13230.00	11587.50
45.0	19867.50	19963.13	19698.75	19068.75	18191.25	16858.13	15221.25	13584.38	12110.63
90.0	19901.25	19704.38	19237.50	18455.63	17004.38	15710.63	13848.75	11191.50	10106.44
135.0	19845.00	19721.25	19192.50	18225.00	16998.75	15480.00	13336.88	11548.13	9798.75
180.0	19771.88	19282.50	18444.38	17083.13	15333.75	13584.38	11054.81	9488.25	7818.75
225.0	19867.50	19361.25	18483.75	17071.88	15300.00	13533.75	11027.81	9679.50	7789.50
270.0	19901.25	19732.50	19220.63	18016.88	16655.63	15075.00	12931.88	11165.63	9410.63
315.0	19845.00	19625.63	19080.00	18056.25	16633.13	15108.75	13269.38	11110.50	9635.63
360.0	19771.88	19845.00	19558.13	18877.50	17926.88	16683.75	14838.75	13230.00	11587.50

C/γ(°)	9.0	10.0	11.0	12.0	13.0	14.0	15.0	16.0	17.0
0.0	9596.25	8083.13	6705.00	5506.88	4291.88	3532.50	2874.38	2622.38	2088.00
45.0	9849.38	8274.38	7036.88	5495.63	4370.63	3673.13	2908.13	2590.31	2080.69
90.0	8439.19	6766.31	5355.00	4333.50	3432.38	2776.50	2356.31	2045.25	1765.13
135.0	7785.00	6356.25	5146.88	4033.13	3189.38	2902.50	2222.44	1937.81	1710.00
180.0	6328.13	4793.63	3853.13	3141.00	2504.81	2144.25	1877.06	1657.13	1497.94
225.0	6313.50	4921.31	3821.63	3090.94	2555.44	2097.56	1842.19	1656.00	1503.00
270.0	7413.75	6018.75	4843.13	3774.38	2975.63	2902.50	2041.88	1777.50	1568.25
315.0	8062.31	6170.06	5137.31	4155.75	3144.38	2686.50	2285.44	1955.81	1726.88
360.0	9596.25	8083.13	6705.00	5506.88	4291.88	3532.50	2874.38	2622.38	2088.00

C/γ(°)	18.0	19.0	20.0	21.0	22.0	23.0	24.0	25.0	26.0
0.0	1855.13	1659.94	1515.38	1422.00	1338.75	1288.13	1242.56	1193.63	1160.44
45.0	1793.81	1613.25	1468.13	1369.13	1296.56	1238.63	1193.06	1159.88	1134.00
90.0	1604.25	1483.88	1383.19	1306.69	1256.06	1210.50	1173.94	1121.57	1112.23
135.0	1539.56	1428.75	1336.50	1272.94	1216.13	1178.44	1143.00	1118.25	1096.31
180.0	1393.88	1305.00	1245.38	1196.44	1160.44	1121.46	1104.86	1081.86	1053.84
225.0	1395.56	1322.44	1261.13	1213.88	1185.75	1156.50	1120.05	1104.30	1071.51
270.0	1422.00	1325.25	1243.13	1181.81	1143.56	1110.94	1078.88	1057.50	1037.25
315.0	1580.63	1461.38	1377.56	1304.44	1248.75	1210.50	1172.81	1120.39	1117.35
360.0	1855.13	1659.94	1515.38	1422.00	1338.75	1288.13	1242.56	1193.63	1160.44

C/γ(°)	27.0	28.0	29.0	30.0	31.0	32.0	33.0	34.0	35.0
0.0	1131.75	1093.50	1065.38	1039.50	972.00	875.25	762.19	623.25	478.69
45.0	1105.88	1078.88	1053.00	1026.56	966.38	865.13	743.06	596.81	470.25
90.0	1085.57	1052.16	1023.13	962.16	865.91	721.58	599.23	476.55	327.77
135.0	1068.19	1034.44	1001.81	919.13	791.44	660.38	522.56	405.56	294.75
180.0	1028.19	974.87	885.26	774.11	652.89	493.76	372.94	248.74	141.75
225.0	1044.56	998.21	887.63	775.46	654.92	497.64	373.89	258.36	135.17
270.0	1006.31	978.75	933.75	843.75	728.44	613.69	483.75	368.44	285.19
315.0	1088.72	1056.71	1024.65	956.81	858.15	712.18	586.63	458.83	303.19
360.0	1131.75	1093.50	1065.38	1039.50	972.00	875.25	762.19	623.25	478.69

C/γ(°)	36.0	37.0	38.0	39.0	40.0	41.0	42.0	43.0	44.0
0.0	351.56	291.38	118.69	52.59	38.98	28.58	20.03	17.78	16.43
45.0	331.88	287.44	111.49	52.99	41.23	30.43	21.71	20.25	19.24
90.0	217.07	123.53	57.15	40.73	29.81	20.42	18.11	17.38	16.99
135.0	220.44	79.59	42.19	33.58	21.43	15.64	14.57	14.06	13.61
180.0	70.14	38.98	31.33	21.38	15.75	14.85	14.40	13.95	13.61
225.0	65.81	41.06	30.66	21.71	16.99	15.81	15.30	14.79	14.40
270.0	136.91	69.13	45.96	34.99	26.33	22.16	20.70	19.86	19.41
315.0	192.54	104.68	49.05	38.19	28.35	20.81	19.01	17.55	16.76
360.0	351.56	291.38	118.69	52.59	38.98	28.58	20.03	17.78	16.43

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	15.69	14.91	14.40	13.89	13.50	13.11	12.77	12.54	12.32
45.0	18.73	18.45	18.11	17.16	16.14	15.47	14.74	14.18	13.67
90.0	16.76	16.31	15.58	14.96	14.46	13.89	13.50	13.28	12.94
135.0	13.33	13.05	12.83	12.60	12.38	12.21	12.04	11.87	11.76
180.0	13.33	12.99	12.83	12.60	12.43	12.21	12.09	11.93	11.81
225.0	14.01	13.61	13.22	12.99	12.77	12.54	12.43	12.38	12.26
270.0	19.13	18.51	17.72	16.99	16.20	15.58	15.08	14.68	14.29
315.0	16.14	15.41	14.74	14.18	13.67	13.11	12.71	12.43	12.21
360.0	15.69	14.91	14.40	13.89	13.50	13.11	12.77	12.54	12.32

C/γ(°)	54.0	55.0	56.0	57.0	58.0	59.0	60.0	61.0	62.0
0.0	12.15	11.93	11.81	11.70	11.64	11.59	11.48	11.42	11.36
45.0	13.28	12.94	12.71	12.43	12.26	12.15	12.04	12.04	12.04
90.0	12.71	12.54	12.43	12.38	12.26	12.26	12.21	12.26	12.26
135.0	11.64	11.53	11.48	11.42	11.42	11.36	11.31	11.31	11.25
180.0	11.70	11.64	11.53	11.48	11.48	11.42	11.48	11.42	11.53
225.0	12.26	12.32	12.49	12.60	12.83	12.99	13.05	13.22	13.28
270.0	13.89	13.56	13.22	12.99	12.71	12.54	12.32	12.15	11.98
315.0	11.98	11.81	11.70	11.53	11.48	11.42	11.36	11.25	11.19
360.0	12.15	11.93	11.81	11.70	11.64	11.59	11.48	11.42	11.36

C/γ(°)	63.0	64.0	65.0	66.0	67.0	68.0	69.0	70.0	71.0
0.0	11.31	11.25	11.25	11.19	11.14	11.08	11.03	10.97	10.91
45.0	11.93	11.93	11.81	11.70	11.59	11.42	11.25	11.14	11.03
90.0	12.26	12.21	11.98	11.87	11.76	11.42	11.36	11.25	11.14
135.0	11.19	11.25	11.25	11.25	11.25	11.19	11.19	11.14	11.14
180.0	11.53	11.64	11.81	11.93	11.98	12.04	11.98	11.93	11.76
225.0	13.16	13.05	12.88	12.60	12.38	12.15	11.81	11.59	11.36
270.0	11.87	11.70	11.42	11.31	11.14	11.08	10.97	11.03	10.91
315.0	11.19	11.14	11.08	11.03	11.03	10.97	10.97	10.91	10.86
360.0	11.31	11.25	11.25	11.19	11.14	11.08	11.03	10.97	10.91

C/γ(°)	72.0	73.0	74.0	75.0	76.0	77.0	78.0	79.0	80.0
0.0	10.86	10.86	10.80	10.74	10.69	10.69	10.63	10.63	10.58
45.0	10.91	10.91	10.80	10.74	10.74	10.69	10.69	10.63	10.58
90.0	11.08	11.03	11.03	11.03	10.97	10.91	10.86	10.80	10.74
135.0	11.14	11.03	11.03	10.91	10.86	10.80	10.80	10.69	10.63
180.0	11.48	11.31	11.19	11.03	10.97	10.91	10.86	10.74	10.74
225.0	11.19	11.08	11.08	11.03	10.91	10.91	10.86	10.74	10.69
270.0	10.91	10.80	10.86	10.80	10.74	10.74	10.69	10.63	10.58
315.0	10.80	10.74	10.69	10.69	10.63	10.63	10.52	10.58	10.46
360.0	10.86	10.86	10.80	10.74	10.69	10.69	10.63	10.63	10.58

C/γ(°)	81.0	82.0	83.0	84.0	85.0	86.0	87.0	88.0	89.0
0.0	10.58	10.52	10.46	10.52	10.46	10.46	10.41	10.35	10.35
45.0	10.52	10.46	10.46	10.46	10.41	10.41	10.35	10.29	10.29
90.0	10.74	10.69	10.58	10.52	10.41	10.41	10.35	10.24	10.24
135.0	10.58	10.58	10.52	10.46	10.46	10.46	10.41	10.35	10.24
180.0	10.69	10.69	10.63	10.63	10.63	10.63	10.46	10.29	10.18
225.0	10.69	10.63	10.58	10.52	10.46	10.41	10.35	10.29	10.18
270.0	10.58	10.52	10.46	10.41	10.35	10.35	10.29	10.18	10.18
315.0	10.46	10.46	10.46	10.46	10.41	10.41	10.35	10.29	10.24
360.0	10.58	10.52	10.46	10.52	10.46	10.46	10.41	10.35	10.35

Intensity data(cd)

C/γ(°)	90.0
0.0	10.35
45.0	10.24
90.0	10.13
135.0	10.13
180.0	10.18
225.0	10.18
270.0	10.13
315.0	10.24
360.0	10.35