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: 2-1570-A
Luminaire: 92.70.188.00+92.70.147.00

Report No: NATA0100	Voltage(V): 34.8400
Test No: GC2019011620	Current(A): 0.3000
LampCAT: NICHIA NFCWL036B-V3	Power (W): 10.4520
Lamp flux(lm): 1299.0	PF: 0.0000
Number of Lamps: 1	Ballast type: DC
Length(mm): 64	Width(mm): 64
Phm Type: C	Height(mm): 0

Photometric Results

Lumens(lm): 1064.09
Efficiency(%): 81.92%
Lumens(lm)/Power(W): 102.03
Central intensity(cd): 9780.468
Maximum intensity(cd): 9780.468
Angle of maximum intensity: C=0.0 γ=0.0
Beam Angle(50%Imax): [C0/180]Total=12.7
[C90/270]Total=12.7
Field angle(10%Imax): [C0/180]Total=29.5
[C90/270]Total=29.5
Maximum s/h(1/2): C0_180=0.22 C90_270=0.22
Maximum s/h(1/4): C0_180=0.23 C90_270=0.23
Up flux rate of lamp(%): 0.00%
Down flux rate of lamp(%): 82.09%
Up flux rate of LUM(%): - -
Down flux rate of LUM(%): 100.00%
CIE Type : Direct lighting
Output flux ratio in π solid angle : 97.539%

Equipment: GMS1980	Date: 2019/1/16	Operator: NT07
Temperature(°C): 10.0	Humidity(%): 65.0%	Distance(m): 7.50

Zonal flux distribution table

γ(°)	Average I(cd)	Zonal F(lm)	Sum F(lm)	Eff Flux(%)	Eff Sum(%)
0.0	9780.469	2.340	2.34	.180%	.220%
1.0	9614.320	18.400	20.74	1.416%	1.949%
2.0	9036.633	34.584	55.324	2.662%	5.199%
3.0	8235.211	47.264	102.588	3.638%	9.641%
4.0	7352.016	56.240	158.828	4.329%	14.926%
5.0	6243.258	59.670	218.498	4.594%	20.534%
6.0	5239.477	60.058	278.557	4.623%	26.178%
7.0	4260.023	56.932	335.489	4.383%	31.528%
8.0	3347.578	51.090	386.579	3.933%	36.329%
9.0	2641.148	45.308	431.887	3.488%	40.587%
10.0	2101.570	40.019	471.906	3.081%	44.348%
11.0	1692.773	35.420	507.326	2.727%	47.677%
12.0	1419.891	32.373	539.699	2.492%	50.719%
13.0	1209.565	29.838	569.537	2.297%	53.523%
14.0	1067.463	28.319	597.857	2.180%	56.185%
15.0	948.762	26.928	624.785	2.073%	58.715%
16.0	840.178	25.396	650.18	1.955%	61.102%
17.0	743.709	23.845	674.025	1.836%	63.343%
18.0	663.384	22.480	696.505	1.731%	65.455%
19.0	601.038	21.458	717.963	1.652%	67.472%
20.0	541.188	20.298	738.261	1.563%	69.379%
21.0	492.054	19.337	757.599	1.489%	71.197%
22.0	452.412	18.585	776.183	1.431%	72.943%
23.0	414.000	17.739	793.923	1.366%	74.610%
24.0	377.712	16.847	810.77	1.297%	76.193%
25.0	346.823	16.073	826.843	1.237%	77.704%
26.0	318.649	15.318	842.161	1.179%	79.144%
27.0	292.402	14.557	856.718	1.121%	80.512%
28.0	274.331	14.123	870.842	1.087%	81.839%
29.0	248.597	13.217	884.058	1.017%	83.081%
30.0	229.071	12.560	896.618	.967%	84.261%
31.0	211.409	11.940	908.559	.919%	85.383%
32.0	192.213	11.170	919.728	.860%	86.433%
33.0	175.205	10.464	930.193	.806%	87.416%
34.0	161.557	9.907	940.1	.763%	88.347%
35.0	148.929	9.367	949.467	.721%	89.228%
36.0	136.301	8.786	958.253	.676%	90.053%
37.0	126.696	8.361	966.614	.644%	90.839%

Zonal flux distribution table

γ(°)	Average I(cd)	Zonal F(lm)	Sum F(lm)	Eff Flux(%)	Eff Sum(%)
38.0	116.937	7.895	974.509	.608%	91.581%
39.0	105.476	7.279	981.788	.560%	92.265%
40.0	95.428	6.727	988.514	.518%	92.897%
41.0	86.048	6.191	994.705	.477%	93.479%
42.0	76.894	5.642	1000.347	.434%	94.009%
43.0	68.738	5.141	1005.488	.396%	94.492%
44.0	60.863	4.636	1010.125	.357%	94.928%
45.0	53.191	4.125	1014.249	.318%	95.316%
46.0	47.180	3.722	1017.971	.287%	95.666%
47.0	41.288	3.311	1021.282	.255%	95.977%
48.0	36.464	2.972	1024.254	.229%	96.256%
49.0	32.238	2.668	1026.922	.205%	96.507%
50.0	28.259	2.374	1029.296	.183%	96.730%
51.0	24.602	2.097	1031.392	.161%	96.927%
52.0	20.890	1.805	1033.197	.139%	97.097%
53.0	16.313	1.429	1034.626	.110%	97.231%
54.0	12.108	1.074	1035.7	.083%	97.332%
55.0	9.788	0.879	1036.579	.068%	97.414%
56.0	8.438	0.767	1037.347	.059%	97.486%
57.0	7.713	0.709	1038.056	.055%	97.553%
58.0	7.523	0.700	1038.756	.054%	97.619%
59.0	7.425	0.698	1039.454	.054%	97.684%
60.0	7.376	0.700	1040.154	.054%	97.750%
61.0	7.355	0.705	1040.859	.054%	97.817%
62.0	7.369	0.713	1041.573	.055%	97.884%
63.0	7.397	0.723	1042.296	.056%	97.952%
64.0	7.418	0.731	1043.027	.056%	98.020%
65.0	7.439	0.739	1043.766	.057%	98.090%
66.0	7.488	0.750	1044.516	.058%	98.160%
67.0	7.523	0.759	1045.276	.058%	98.232%
68.0	7.559	0.769	1046.044	.059%	98.304%
69.0	7.622	0.780	1046.825	.060%	98.377%
70.0	7.664	0.790	1047.614	.061%	98.451%
71.0	7.727	0.801	1048.416	.062%	98.527%
72.0	7.791	0.813	1049.228	.063%	98.603%
73.0	7.840	0.822	1050.05	.063%	98.680%
74.0	7.924	0.835	1050.886	.064%	98.759%
75.0	8.051	0.853	1051.738	.066%	98.839%

Zonal flux distribution table

γ(°)	Average I(cd)	Zonal F(lm)	Sum F(lm)	Eff Flux(%)	Eff Sum(%)
76.0	8.191	0.872	1052.61	.067%	98.921%
77.0	8.388	0.896	1053.506	.069%	99.005%
78.0	8.684	0.931	1054.438	.072%	99.093%
79.0	8.951	0.964	1055.401	.074%	99.183%
80.0	9.218	0.995	1056.397	.077%	99.277%
81.0	9.176	0.994	1057.39	.077%	99.370%
82.0	8.972	0.974	1058.365	.075%	99.462%
83.0	9.007	0.980	1059.345	.075%	99.554%
84.0	9.070	0.989	1060.334	.076%	99.647%
85.0	9.070	0.991	1061.325	.076%	99.740%
86.0	8.888	0.972	1062.297	.075%	99.831%
87.0	5.660	0.620	1062.917	.048%	99.889%
88.0	4.338	0.475	1063.393	.037%	99.934%
89.0	4.282	0.469	1063.862	.036%	99.978%
90.0	4.212	0.231	1064.093	.018%	100.000%

Zonal flux distribution table

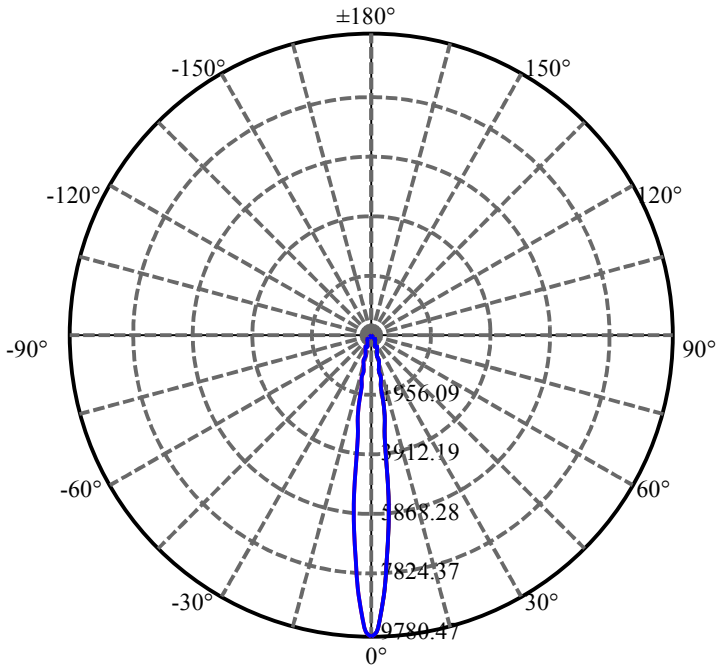
ZONAL LUMEN SUMMARY

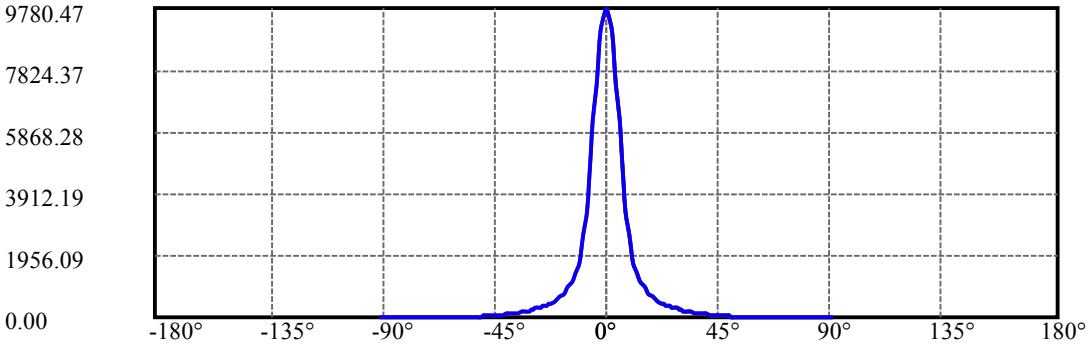
Zone	Lumens	%Lamp	%Fixt
0-30	896.62	69.02%	84.26%
0-40	988.51	76.10%	92.90%
0-60	1040.15	80.07%	97.75%
0-90	1063.86	81.90%	99.98%
0-120	1063.86	81.90%	99.98%
0-180	1064.09	81.92%	100.00%
60-90	24.41	1.88%	2.29%
90-120	0.00	0.00%	0.00%
90-130	0.00	0.00%	0.00%
90-150	0.00	0.00%	0.00%
90-180	0.00	0.00%	0.00%
0-26.63	851.27	65.53%	80.00%

ZONAL LUMEN SUMMARY

0-10	471.91
10-20	266.36
20-30	158.36
30-40	91.90
40-50	40.78
50-60	10.86
60-70	7.46
70-80	8.78
80-90	7.47
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:14.8 Right:14.8
:C90/270Left:14.8 Right:14.8

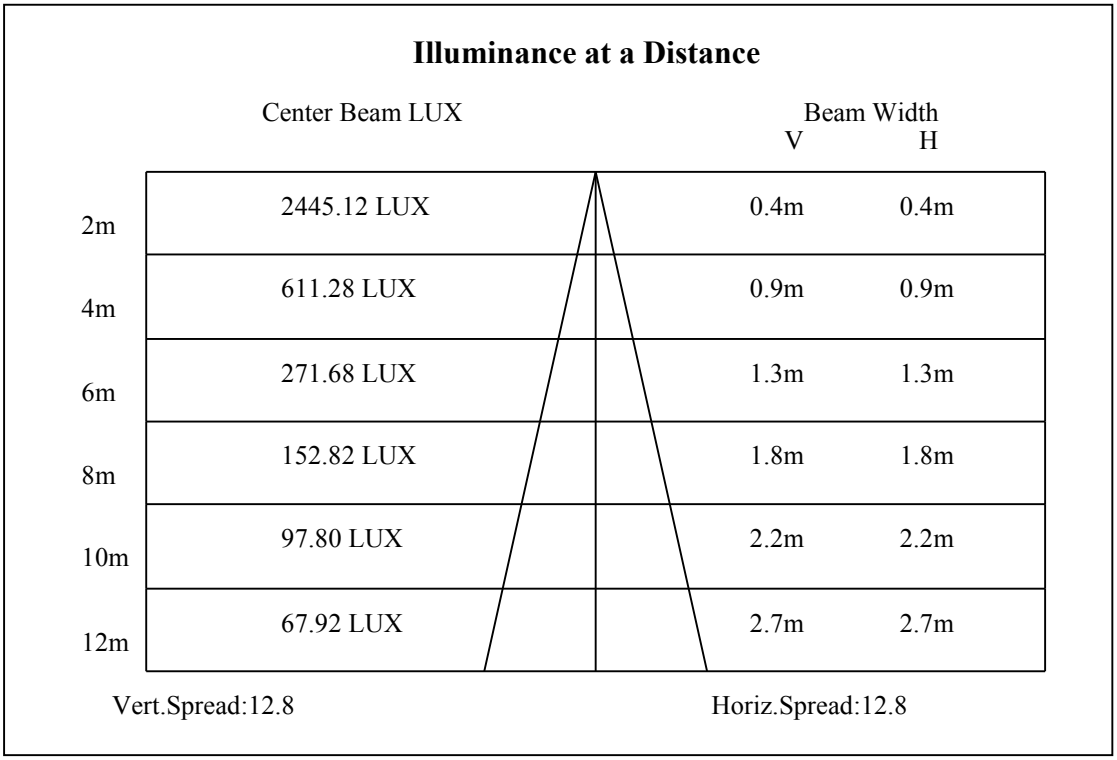
Beam Angle(50%Imax):C0/180Left:6.4 Right:6.4
:C90/270Left:6.4 Right:6.4

Equipment: GMS1980
Temperature(°C): 10.0

Date: 2019/1/16
Humidity(%): 65.0%

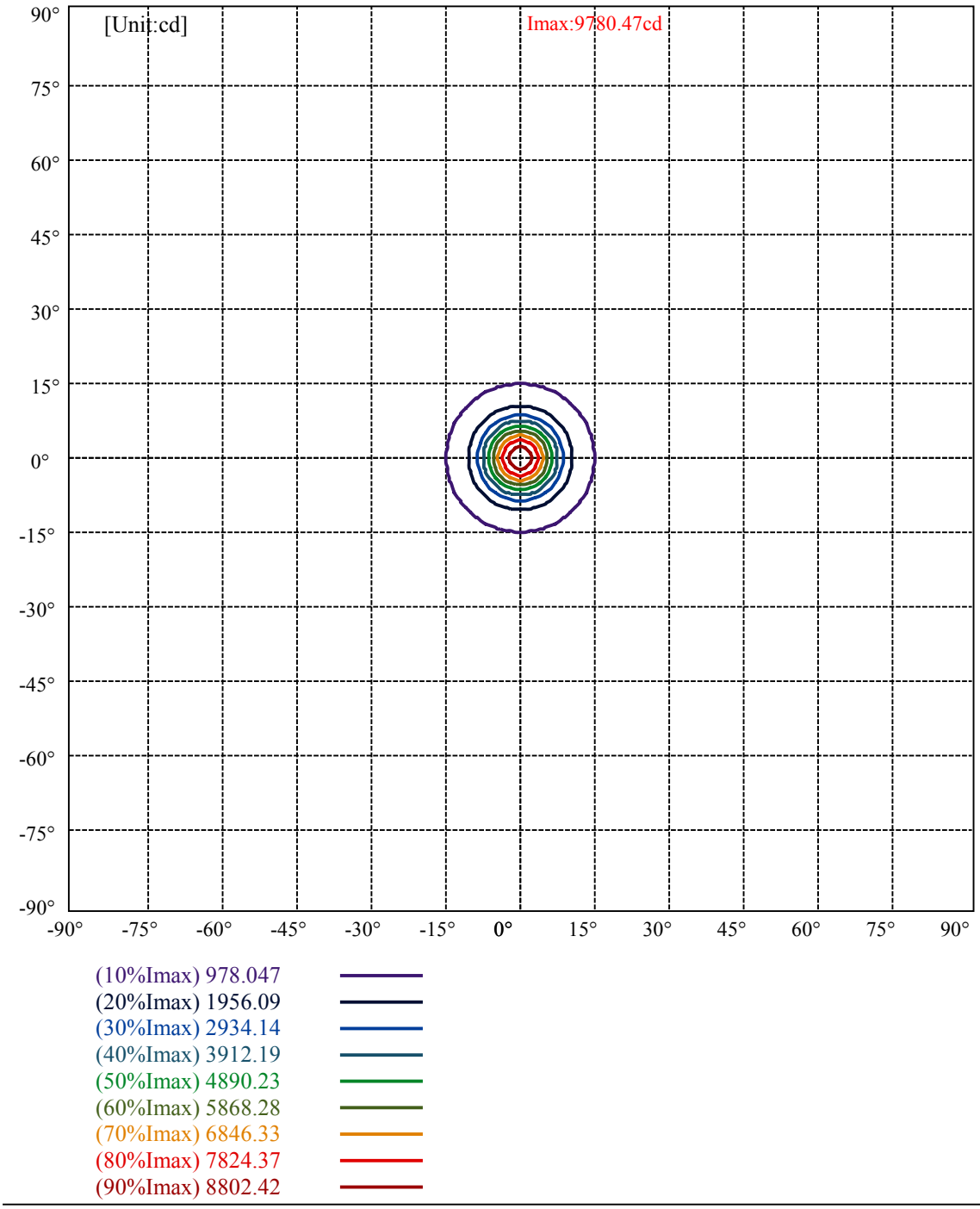
Operator: NT07
Distance(m): 7.50

Lux distance Curve



Equipment: GMS1980 Date: 2019/1/16 Operator: NT07
Temperature(°C): 10.0 Humidity(%): 65.0% Distance(m): 7.50

ISO-Intensity(V-H)

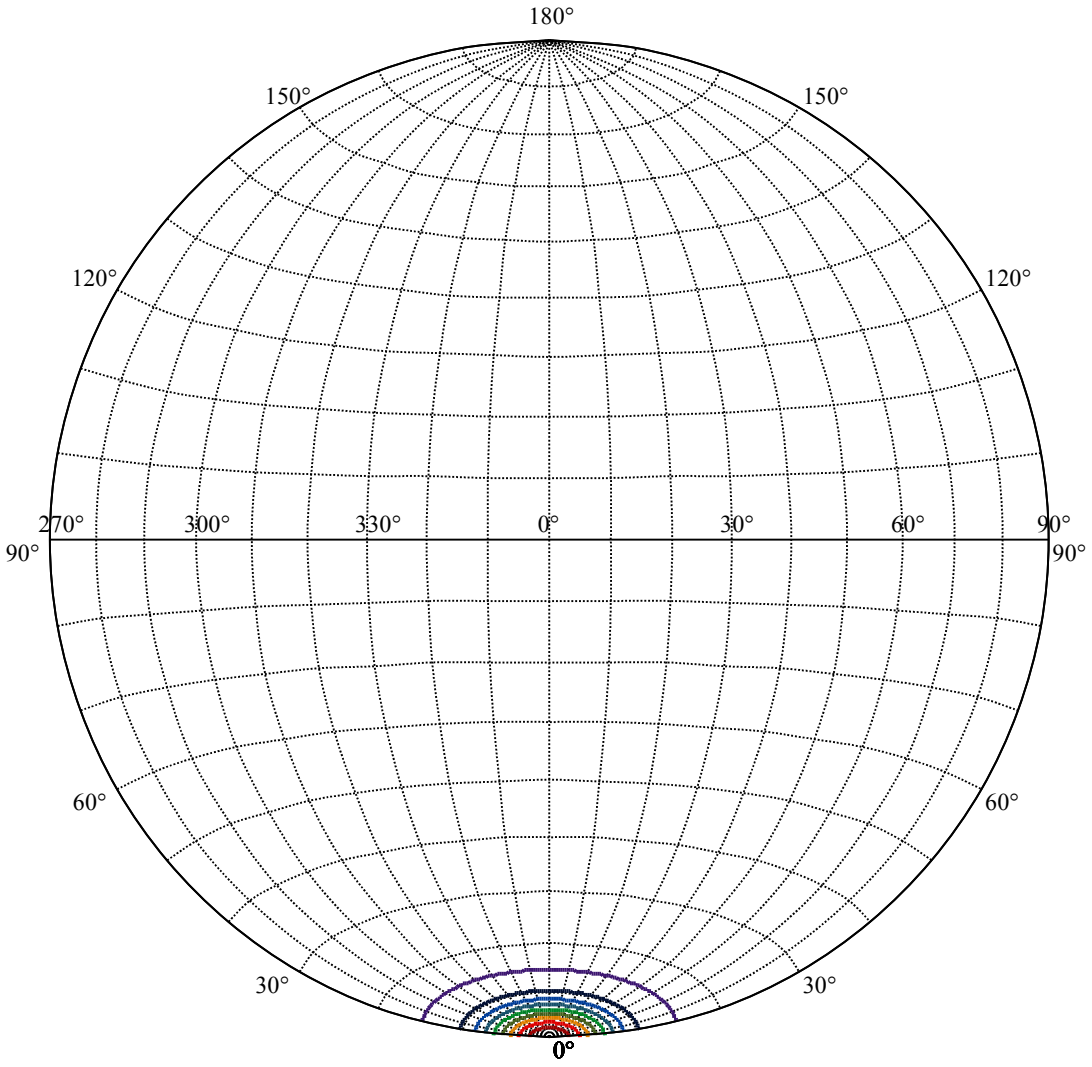


Equipment: GMS1980
Temperature(°C): 10.0

Date: 2019/1/16
Humidity(%): 65.0%

Operator: NT07
Distance(m): 7.50

ISO candela diagram on circular web



House [Unit:cd] Road

Imax:9780.47

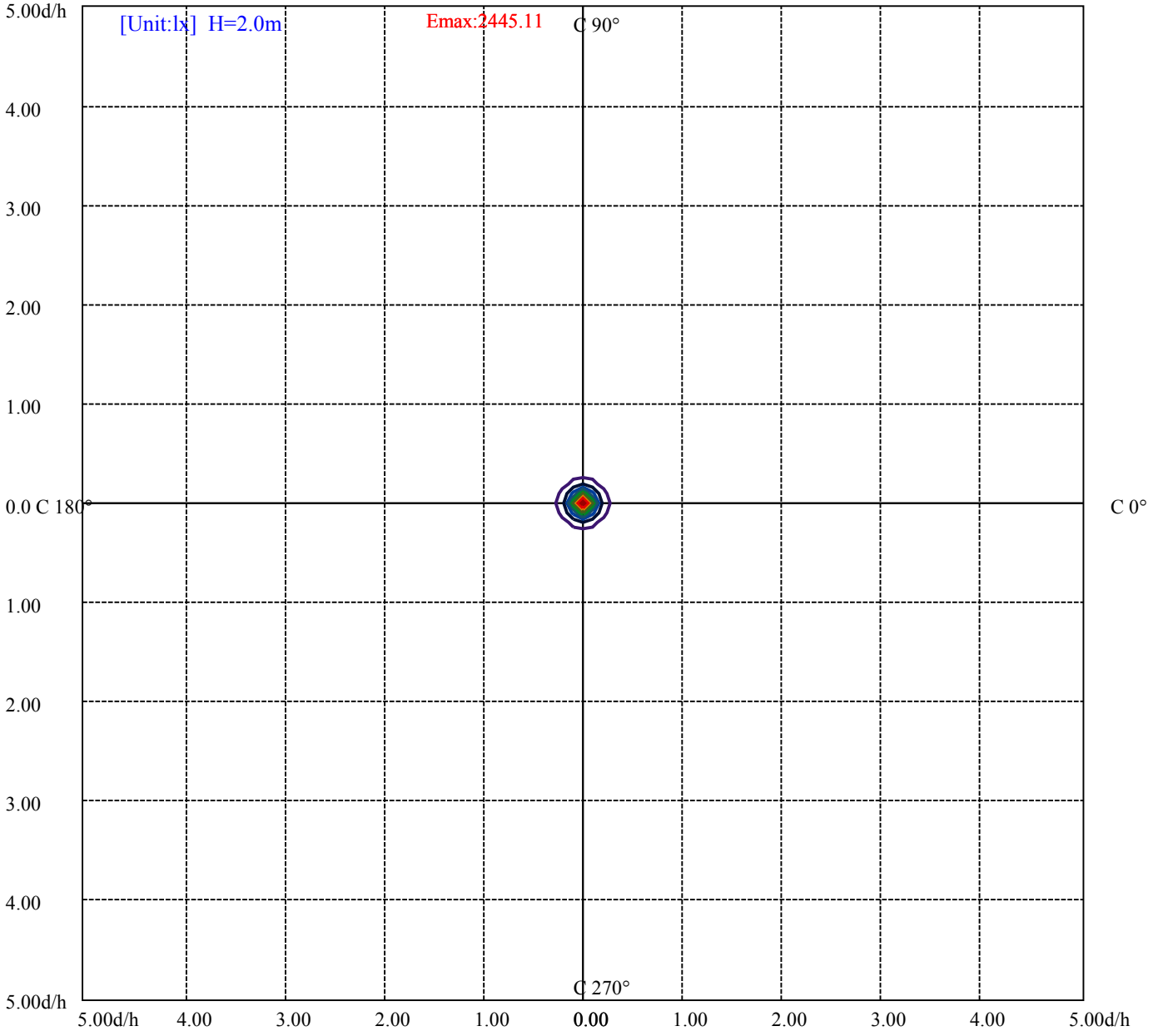
(10%Imax) 978.047
(20%Imax) 1956.09
(30%Imax) 2934.14
(40%Imax) 3912.19
(50%Imax) 4890.23
(60%Imax) 5868.28
(70%Imax) 6846.33
(80%Imax) 7824.37
(90%Imax) 8802.42

Equipment: GMS1980
Temperature(°C): 10.0

Date: 2019/1/16
Humidity(%): 65.0%

Operator: NT07
Distance(m): 7.50

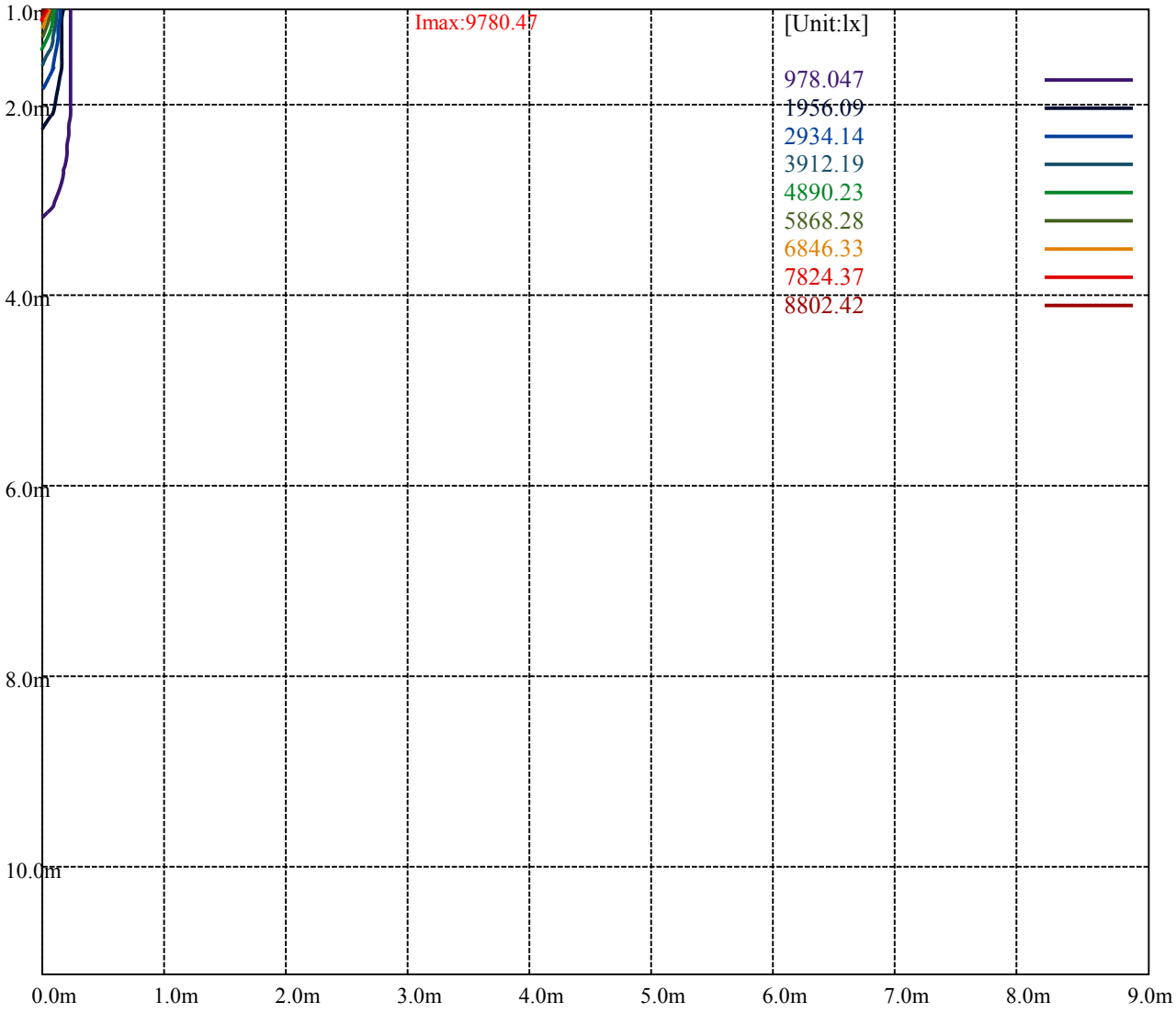
ISO illuminance diagram



(10%Emax) 244.511
(20%Emax) 489.0225
(30%Emax) 733.5325
(40%Emax) 978.045
(50%Emax) 1222.555
(60%Emax) 1467.068
(70%Emax) 1711.578
(80%Emax) 1956.088
(90%Emax) 2200.6

Equipment: GMS1980
Temperature(°C): 10.0
Date: 2019/1/16
Humidity(%): 65.0%
Operator: NT07
Distance(m): 7.50

Space ISO Lux diagram



Equipment: GMS1980
Temperature(°C): 10.0

Date: 2019/1/16
Humidity(%): 65.0%

Operator: NT07
Distance(m): 7.50

NATA 2-1570-A

Luminance Limitting Curve(no luminous side)

Luminance Table

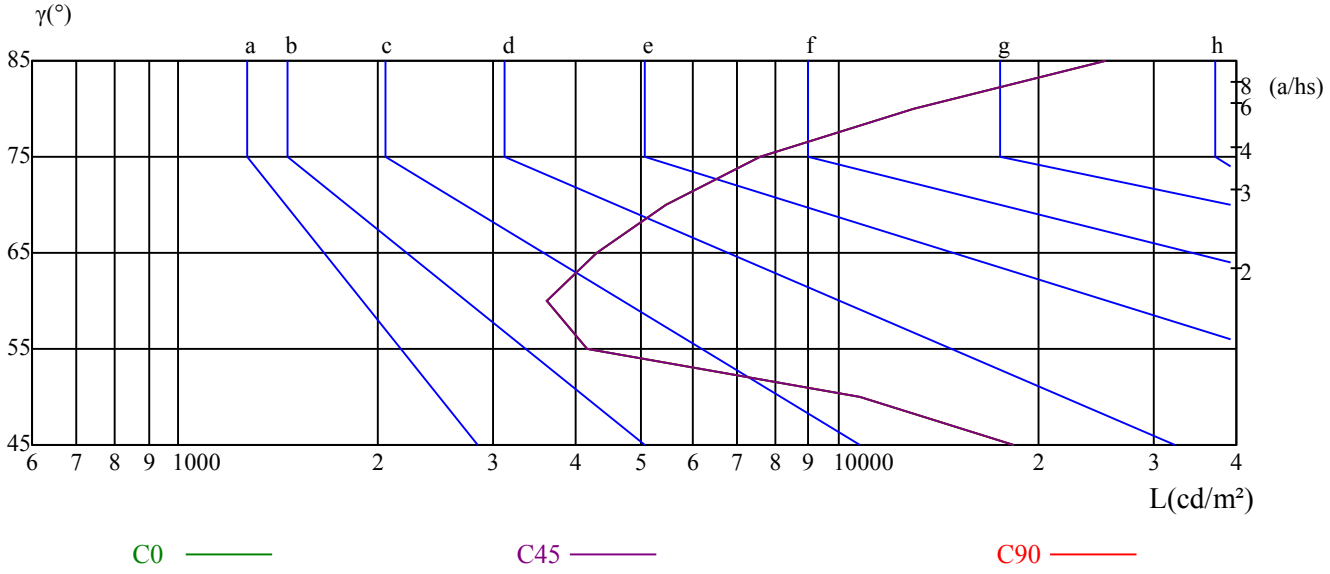
γ	45	50	55	60	65	70	75	80	85
C0	18365	10733	4166	3601	4297	5471	7594	12960	25408
C45	18365	10733	4166	3601	4297	5471	7594	12960	25408
C90	18365	10733	4166	3601	4297	5471	7594	12960	25408

L(Hor)(65)	L(Ver)(65)	L45(65)	L(Hor)(75)	L(Ver)(75)	L45(75)	L(Hor)(85)	L(Ver)(85)	L45(85)
4297	4297	4297	7594	7594	7594	25408	25408	25408

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

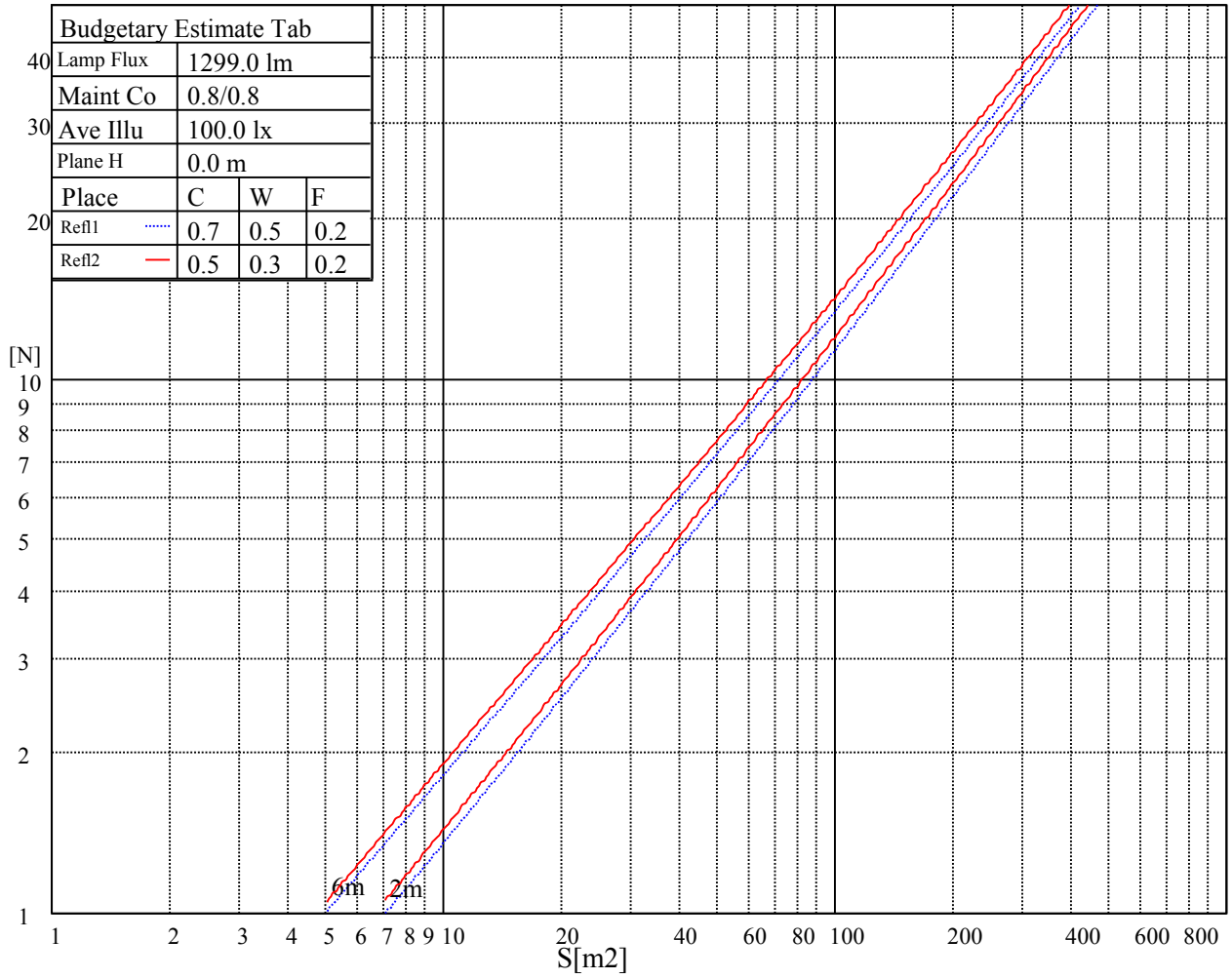


UGR Glare

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	7.21	8.18	7.57	8.49	8.81	6.83	7.80	7.19	8.11	8.43
	3H	10.14	11.00	10.52	11.33	11.70	9.96	10.82	10.35	11.16	11.53
	4H	12.01	12.80	12.42	13.16	13.55	11.88	12.68	12.29	13.03	13.42
	6H	14.40	15.13	14.82	15.51	15.91	14.18	14.91	14.60	15.28	15.68
	8H	15.70	16.38	16.13	16.77	17.18	15.45	16.13	15.88	16.52	16.93
	12H	17.65	18.31	18.09	18.69	19.12	17.44	18.10	17.88	18.48	18.91
4H	2H	7.90	8.70	8.31	9.05	9.44	7.62	8.42	8.03	8.77	9.16
	3H	11.25	11.90	11.66	12.31	12.72	11.13	11.78	11.55	12.19	12.60
	4H	13.35	13.94	13.79	14.36	14.81	13.26	13.84	13.69	14.27	14.71
	6H	15.60	16.11	16.07	16.56	17.03	15.42	15.92	15.89	16.37	16.85
	8H	17.13	17.60	17.60	18.05	18.52	16.92	17.38	17.39	17.84	18.31
	12H	19.05	19.45	19.54	19.94	20.42	18.87	19.27	19.36	19.76	20.24
8H	4H	14.25	14.72	14.72	15.17	15.64	14.17	14.64	14.65	15.09	15.57
	6H	16.93	17.30	17.44	17.80	18.29	16.77	17.15	17.28	17.65	18.13
	8H	18.57	18.90	19.10	19.43	19.92	18.40	18.73	18.93	19.25	19.75
	12H	20.50	20.79	21.02	21.29	21.87	20.35	20.64	20.88	21.14	21.72
12H	4H	14.55	14.96	15.04	15.45	15.92	14.50	14.91	14.99	15.39	15.87
	6H	17.63	17.69	17.90	18.17	18.71	17.50	17.57	17.77	18.04	18.59
	8H	19.12	19.41	19.64	19.91	20.49	18.97	19.26	19.49	19.76	20.34

Variation with the observer position at spacings:		
S = 1.0H	2.3/-3.2	2.3/-3.2
S = 1.5H	3.1/-2.4	3.1/-2.4
S = 2.0H	3.6/-2.0	3.6/-2.0
Standard tables:	BKBF	BKBF
Uncorrected UGR	3.5	3.5

Budgetary Estimate Table

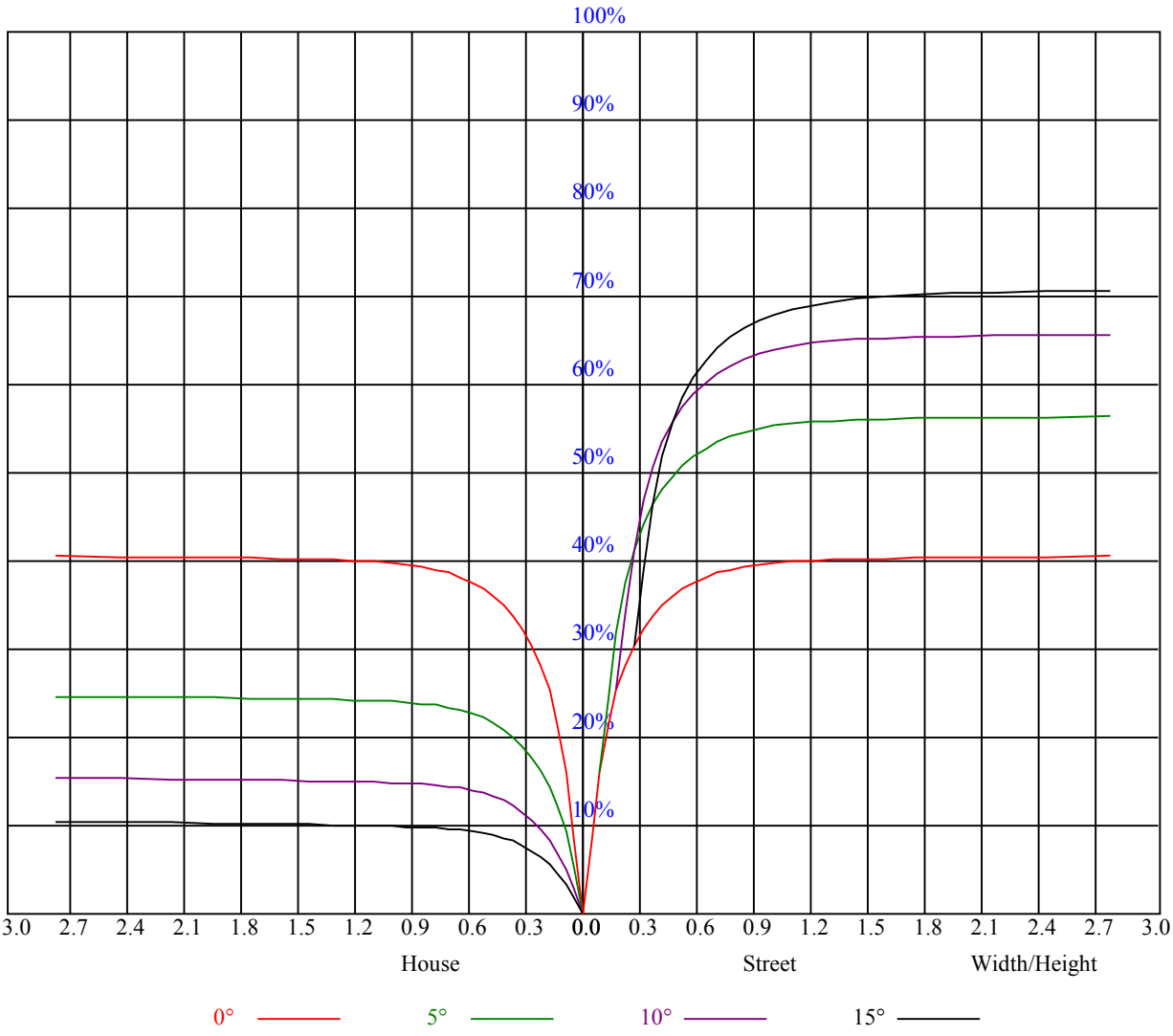


Equipment: GMS1980 Date: 2019/1/16 Operator: NT07
Temperature(°C): 10.0 Humidity(%): 65.0% Distance(m): 7.50

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	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	0.92	0.90	0.88	0.90	0.88	0.87	0.87	0.85	0.84	0.84	0.83	0.82	0.81	0.80	0.79	0.78
2	0.87	0.84	0.82	0.86	0.83	0.81	0.83	0.81	0.79	0.81	0.79	0.77	0.78	0.77	0.76	0.75
3	0.83	0.79	0.77	0.82	0.79	0.76	0.80	0.77	0.75	0.78	0.76	0.74	0.76	0.74	0.73	0.72
4	0.79	0.76	0.73	0.78	0.75	0.73	0.77	0.74	0.72	0.75	0.73	0.71	0.74	0.72	0.70	0.69
5	0.76	0.72	0.70	0.75	0.72	0.69	0.74	0.71	0.69	0.73	0.70	0.68	0.72	0.69	0.68	0.67
6	0.73	0.70	0.67	0.73	0.69	0.67	0.72	0.69	0.66	0.71	0.68	0.66	0.70	0.67	0.66	0.65
7	0.71	0.67	0.65	0.70	0.67	0.65	0.70	0.66	0.64	0.69	0.66	0.64	0.68	0.65	0.64	0.63
8	0.69	0.65	0.63	0.68	0.65	0.63	0.68	0.64	0.62	0.67	0.64	0.62	0.66	0.64	0.62	0.61
9	0.67	0.63	0.61	0.66	0.63	0.61	0.66	0.63	0.61	0.65	0.62	0.60	0.65	0.62	0.60	0.59
10	0.65	0.61	0.59	0.65	0.61	0.59	0.64	0.61	0.59	0.64	0.61	0.59	0.63	0.61	0.59	0.58

Coefficient Utilization Curve



Equipment: GMS1980	Date: 2019/1/16	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	9798.19	9728.44	9252.00	8556.19	7589.81	6514.31	5549.06	4499.44	3660.75
45.0	9795.94	9494.44	8733.38	7923.94	7014.38	5810.63	4837.50	3939.19	3081.94
90.0	9720.56	9332.44	8590.50	7644.94	6696.00	5590.13	4626.56	3638.25	2732.06
135.0	9807.19	9723.94	9090.56	8348.06	7585.88	6269.06	5284.69	4453.31	3405.38
180.0	9798.19	9495.56	8906.06	7912.69	6977.81	5997.94	4892.06	3857.06	3065.63
225.0	9795.94	9759.94	9322.31	8565.75	7715.81	6644.25	5650.88	4586.06	3613.50
270.0	9720.56	9793.13	9420.75	8807.06	7994.81	6825.94	5853.94	4894.31	3902.06
315.0	9807.19	9586.69	8977.50	8123.06	7241.63	6293.81	5221.13	4212.56	3319.31
360.0	9798.19	9728.44	9252.00	8556.19	7589.81	6514.31	5549.06	4499.44	3660.75

C/γ(°)	9.0	10.0	11.0	12.0	13.0	14.0	15.0	16.0	17.0
0.0	2873.81	2257.88	1847.81	1547.44	1287.56	1139.06	1015.31	879.19	786.94
45.0	2406.38	1953.00	1587.94	1362.38	1182.94	1041.19	930.38	820.69	726.75
90.0	2241.56	1771.31	1433.25	1216.69	1122.24	988.20	868.95	775.07	692.55
135.0	2633.06	2165.63	1678.50	1402.88	1212.19	1038.94	927.56	828.00	723.38
180.0	2365.31	1866.94	1555.88	1307.81	1109.70	1002.99	882.56	790.76	709.31
225.0	2889.56	2257.31	1796.63	1510.31	1304.44	1098.62	992.64	884.08	767.25
270.0	3053.25	2445.19	1924.31	1598.06	1344.38	1166.06	1037.25	907.88	795.94
315.0	2666.25	2095.31	1717.88	1413.56	1113.08	1064.64	935.44	835.76	747.56
360.0	2873.81	2257.88	1847.81	1547.44	1287.56	1139.06	1015.31	879.19	786.94

C/γ(°)	18.0	19.0	20.0	21.0	22.0	23.0	24.0	25.0	26.0
0.0	707.06	637.88	565.31	516.94	475.31	434.25	396.00	364.50	333.00
45.0	657.56	597.94	538.31	495.56	456.19	416.25	380.81	351.00	322.31
90.0	608.34	554.18	507.15	457.59	421.48	387.00	352.07	321.13	296.04
135.0	651.38	590.63	527.06	483.19	441.56	402.75	367.88	338.06	310.50
180.0	624.32	568.01	518.74	465.75	428.29	394.99	357.58	331.26	306.90
225.0	691.48	627.19	567.34	517.11	477.34	435.38	401.29	366.53	336.21
270.0	711.00	639.56	567.00	519.19	477.56	435.38	396.00	363.94	330.75
315.0	655.93	592.93	538.59	481.11	441.56	406.01	370.07	338.18	313.48
360.0	707.06	637.88	565.31	516.94	475.31	434.25	396.00	364.50	333.00

C/γ(°)	27.0	28.0	29.0	30.0	31.0	32.0	33.0	34.0	35.0
0.0	305.44	288.56	257.91	239.51	220.11	201.21	184.84	169.59	155.42
45.0	296.44	285.19	255.99	232.54	212.01	195.19	174.60	160.03	149.96
90.0	271.91	252.39	231.86	212.46	196.43	176.85	160.59	148.78	138.26
135.0	285.19	270.00	241.26	223.48	205.09	185.91	171.73	159.58	145.52
180.0	279.84	259.71	241.14	219.49	205.09	185.91	168.47	157.56	145.86
225.0	311.68	289.01	263.98	245.76	227.81	205.09	186.86	171.34	158.68
270.0	300.94	285.19	252.11	235.69	218.14	199.80	183.26	167.06	150.75
315.0	287.78	264.60	244.52	223.65	206.61	187.76	171.28	158.51	146.98
360.0	305.44	288.56	257.91	239.51	220.11	201.21	184.84	169.59	155.42

C/γ(°)	36.0	37.0	38.0	39.0	40.0	41.0	42.0	43.0	44.0
0.0	144.34	133.88	122.01	112.67	102.49	91.86	82.18	74.19	65.14
45.0	136.46	126.62	117.73	103.67	93.26	83.76	73.29	65.25	57.54
90.0	125.89	117.45	108.68	96.47	87.86	80.33	72.56	64.69	57.94
135.0	134.61	124.88	114.13	103.67	93.94	84.71	74.76	67.16	58.84
180.0	130.78	122.23	113.74	101.93	90.90	81.96	73.13	64.35	56.93
225.0	144.79	134.44	124.71	111.21	100.01	88.99	80.16	71.10	63.06
270.0	139.95	129.94	118.91	110.48	100.46	90.79	82.01	74.93	66.94
315.0	133.59	124.14	115.59	103.73	94.50	86.01	77.06	68.23	60.53
360.0	144.34	133.88	122.01	112.67	102.49	91.86	82.18	74.19	65.14

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	56.70	49.95	43.14	37.91	32.85	28.41	24.86	21.38	16.26
45.0	49.61	44.16	39.38	34.76	30.94	27.96	24.53	20.19	15.58
90.0	51.30	45.90	40.56	35.61	31.61	27.23	23.06	19.01	14.57
135.0	51.58	45.79	40.22	35.78	31.33	27.45	24.19	20.76	15.64
180.0	49.61	43.93	38.31	33.41	29.59	25.65	22.05	18.34	14.18
225.0	54.96	48.60	42.08	37.69	33.75	29.25	25.76	22.39	18.51
270.0	59.18	52.93	46.58	41.68	36.90	33.08	28.91	24.98	19.80
315.0	52.59	46.18	40.05	34.88	30.94	27.06	23.46	20.08	15.98
360.0	56.70	49.95	43.14	37.91	32.85	28.41	24.86	21.38	16.26

C/γ(°)	54.0	55.0	56.0	57.0	58.0	59.0	60.0	61.0	62.0
0.0	12.26	9.73	8.16	7.31	7.20	7.20	7.20	7.20	7.26
45.0	11.59	9.23	7.82	7.37	7.09	6.98	6.86	6.81	6.81
90.0	10.69	9.28	8.16	7.82	7.65	7.54	7.54	7.48	7.54
135.0	11.98	9.73	8.61	8.10	7.99	7.93	7.88	7.88	7.93
180.0	10.29	8.49	7.82	7.54	7.48	7.48	7.54	7.54	7.54
225.0	13.11	10.35	8.55	7.43	7.26	7.14	7.03	7.03	7.03
270.0	15.24	12.04	9.73	8.38	7.93	7.65	7.54	7.48	7.43
315.0	11.70	9.45	8.66	7.76	7.59	7.48	7.43	7.43	7.43
360.0	12.26	9.73	8.16	7.31	7.20	7.20	7.20	7.20	7.26

C/γ(°)	63.0	64.0	65.0	66.0	67.0	68.0	69.0	70.0	71.0
0.0	7.31	7.37	7.37	7.37	7.43	7.48	7.54	7.59	7.65
45.0	6.86	6.86	6.92	6.98	7.03	7.09	7.14	7.20	7.31
90.0	7.59	7.59	7.65	7.71	7.71	7.71	7.82	7.88	7.88
135.0	7.93	7.99	8.04	8.10	8.10	8.16	8.21	8.21	8.27
180.0	7.54	7.54	7.54	7.59	7.65	7.65	7.71	7.76	7.82
225.0	7.03	7.03	7.03	7.09	7.14	7.20	7.26	7.31	7.43
270.0	7.43	7.43	7.43	7.43	7.48	7.48	7.54	7.54	7.59
315.0	7.48	7.54	7.54	7.65	7.65	7.71	7.76	7.82	7.88
360.0	7.31	7.37	7.37	7.37	7.43	7.48	7.54	7.59	7.65

C/γ(°)	72.0	73.0	74.0	75.0	76.0	77.0	78.0	79.0	80.0
0.0	7.76	7.76	7.88	7.93	7.93	7.99	8.04	8.16	8.27
45.0	7.43	7.54	7.65	7.93	8.27	8.78	9.62	10.13	10.74
90.0	7.93	7.99	8.10	8.27	8.55	8.89	9.06	9.39	9.39
135.0	8.33	8.33	8.33	8.44	8.49	8.55	8.78	8.94	9.11
180.0	7.82	7.88	7.93	7.99	8.04	8.10	8.21	8.38	8.49
225.0	7.48	7.59	7.71	7.88	8.10	8.44	8.94	9.45	10.35
270.0	7.65	7.65	7.76	7.82	7.88	7.99	8.21	8.38	8.55
315.0	7.93	7.99	8.04	8.16	8.27	8.38	8.61	8.78	8.83
360.0	7.76	7.76	7.88	7.93	7.93	7.99	8.04	8.16	8.27

C/γ(°)	81.0	82.0	83.0	84.0	85.0	86.0	87.0	88.0	89.0
0.0	8.44	8.61	8.83	9.00	9.00	9.06	4.73	4.33	4.33
45.0	9.28	9.28	9.62	9.90	10.07	9.45	4.44	4.33	4.33
90.0	9.06	8.94	8.94	9.06	9.00	8.83	4.56	4.28	4.22
135.0	9.06	8.89	8.78	8.66	8.55	8.33	8.21	4.39	4.22
180.0	8.66	8.78	8.83	8.78	8.61	8.49	4.84	4.33	4.28
225.0	11.36	9.79	9.45	9.51	9.56	9.56	8.10	4.33	4.28
270.0	8.72	8.72	8.78	8.78	8.83	8.78	6.02	4.39	4.33
315.0	8.83	8.78	8.83	8.89	8.94	8.61	4.39	4.33	4.28
360.0	8.44	8.61	8.83	9.00	9.00	9.06	4.73	4.33	4.33

Intensity data(cd)

C/γ(°)	90.0
0.0	4.22
45.0	4.22
90.0	4.22
135.0	4.22
180.0	4.22
225.0	4.22
270.0	4.22
315.0	4.16
360.0	4.22