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Address:380JinOu Road,GaoXin Zone,Jiang Men City,Guangdong,China

NATA

LumCAT: 2-1793-N
Luminaire: 92.70.131.00
Report No: NATA0100
Test No: GC2019011805
LampCAT: CITIZEN CLU710
Lamp flux(lm): 1285.0
Number of Lamps: 1
Length(mm): 69
Phm Type: C

Voltage(V): 35.3000
Current(A): 0.2900
Power (W): 10.5900
PF: 0.0000
Ballast type: DC
Width(mm): 69
Height(mm): 0

Photometric Results

Lumens(lm): 1083.45
Efficiency(%): 84.32%
Lumens(lm)/Power(W): 102.53
Central intensity(cd): 9877.359
Maximum intensity(cd): 9877.359
Angle of maximum intensity: C=0.0 γ=0.0
Beam Angle(50%Imax): [C0/180]Total=14.1
[C90/270]Total=14.1
Field angle(10%Imax): [C0/180]Total=29.0
[C90/270]Total=29.0
Maximum s/h(1/2): C0_180=0.24 C90_270=0.24
Maximum s/h(1/4): C0_180=0.25 C90_270=0.25
Up flux rate of lamp(%): 0.00%
Down flux rate of lamp(%): 84.50%
Up flux rate of LUM(%): - -
Down flux rate of LUM(%): 100.00%
CIE Type : Direct lighting
Output flux ratio in π solid angle : 97.978%

Zonal flux distribution table

γ(°)	Average I(cd)	Zonal F(lm)	Sum F(lm)	Eff Flux(%)	Eff Sum(%)
0.0	9877.359	2.363	2.363	.184%	.218%
1.0	9750.797	18.662	21.025	1.452%	1.941%
2.0	9370.688	35.863	56.887	2.791%	5.251%
3.0	8753.695	50.239	107.127	3.910%	9.887%
4.0	7953.539	60.841	167.968	4.735%	15.503%
5.0	7031.602	67.205	235.173	5.230%	21.706%
6.0	6043.852	69.279	304.451	5.391%	28.100%
7.0	4987.266	66.651	371.103	5.187%	34.252%
8.0	4133.672	63.087	434.19	4.910%	40.075%
9.0	3304.547	56.689	490.879	4.412%	45.307%
10.0	2586.164	49.247	540.126	3.832%	49.852%
11.0	2085.047	43.628	583.754	3.395%	53.879%
12.0	1634.175	37.259	621.013	2.900%	57.318%
13.0	1296.928	31.993	653.006	2.490%	60.271%
14.0	1067.217	28.313	681.318	2.203%	62.884%
15.0	905.435	25.698	707.017	2.000%	65.256%
16.0	752.955	22.759	729.776	1.771%	67.356%
17.0	661.802	21.219	750.994	1.651%	69.315%
18.0	591.574	20.047	771.041	1.560%	71.165%
19.0	540.443	19.295	790.336	1.502%	72.946%
20.0	505.090	18.944	809.28	1.474%	74.694%
21.0	477.773	18.776	828.056	1.461%	76.427%
22.0	456.202	18.741	846.797	1.458%	78.157%
23.0	439.200	18.819	865.616	1.464%	79.894%
24.0	424.645	18.940	884.556	1.474%	81.642%
25.0	410.857	19.041	903.597	1.482%	83.400%
26.0	401.161	19.285	922.882	1.501%	85.180%
27.0	391.584	19.495	942.377	1.517%	86.979%
28.0	375.047	19.308	961.685	1.503%	88.761%
29.0	347.344	18.466	980.152	1.437%	90.465%
30.0	306.176	16.788	996.939	1.306%	92.015%
31.0	243.120	13.731	1010.671	1.069%	93.282%
32.0	178.313	10.362	1021.033	.806%	94.239%
33.0	114.877	6.861	1027.894	.534%	94.872%
34.0	65.848	4.038	1031.932	.314%	95.245%
35.0	44.782	2.817	1034.748	.219%	95.505%
36.0	35.318	2.276	1037.025	.177%	95.715%
37.0	30.874	2.038	1039.062	.159%	95.903%

Zonal flux distribution table

γ(°)	Average I(cd)	Zonal F(lm)	Sum F(lm)	Eff Flux(%)	Eff Sum(%)
38.0	27.555	1.860	1040.923	.145%	96.074%
39.0	24.898	1.718	1042.641	.134%	96.233%
40.0	22.437	1.582	1044.222	.123%	96.379%
41.0	20.468	1.473	1045.695	.115%	96.515%
42.0	18.752	1.376	1047.071	.107%	96.642%
43.0	16.938	1.267	1048.338	.099%	96.759%
44.0	15.609	1.189	1049.527	.093%	96.869%
45.0	14.407	1.117	1050.644	.087%	96.972%
46.0	13.296	1.049	1051.693	.082%	97.068%
47.0	12.466	1.000	1052.693	.078%	97.161%
48.0	11.791	0.961	1053.654	.075%	97.249%
49.0	11.145	0.922	1054.576	.072%	97.335%
50.0	10.645	0.894	1055.47	.070%	97.417%
51.0	10.259	0.874	1056.344	.068%	97.498%
52.0	9.900	0.855	1057.2	.067%	97.577%
53.0	9.647	0.845	1058.045	.066%	97.655%
54.0	9.422	0.836	1058.881	.065%	97.732%
55.0	9.246	0.831	1059.711	.065%	97.809%
56.0	9.091	0.827	1060.538	.064%	97.885%
57.0	8.972	0.825	1061.363	.064%	97.961%
58.0	8.817	0.820	1062.183	.064%	98.037%
59.0	8.719	0.820	1063.002	.064%	98.112%
60.0	8.599	0.817	1063.819	.064%	98.188%
61.0	8.508	0.816	1064.635	.064%	98.263%
62.0	8.430	0.816	1065.451	.064%	98.338%
63.0	8.346	0.815	1066.267	.063%	98.414%
64.0	8.205	0.809	1067.076	.063%	98.488%
65.0	8.016	0.797	1067.872	.062%	98.562%
66.0	7.826	0.784	1068.656	.061%	98.634%
67.0	7.615	0.769	1069.425	.060%	98.705%
68.0	7.418	0.754	1070.179	.059%	98.775%
69.0	7.242	0.741	1070.921	.058%	98.843%
70.0	7.073	0.729	1071.65	.057%	98.910%
71.0	6.891	0.714	1072.364	.056%	98.976%
72.0	6.729	0.702	1073.066	.055%	99.041%
73.0	6.560	0.688	1073.754	.054%	99.105%
74.0	6.420	0.677	1074.43	.053%	99.167%
75.0	6.272	0.664	1075.095	.052%	99.228%

Zonal flux distribution table

γ(°)	Average I(cd)	Zonal F(lm)	Sum F(lm)	Eff Flux(%)	Eff Sum(%)
76.0	6.138	0.653	1075.748	.051%	99.289%
77.0	5.991	0.640	1076.388	.050%	99.348%
78.0	5.885	0.631	1077.019	.049%	99.406%
79.0	5.766	0.621	1077.64	.048%	99.463%
80.0	5.632	0.608	1078.248	.047%	99.519%
81.0	5.534	0.599	1078.848	.047%	99.575%
82.0	5.407	0.587	1079.435	.046%	99.629%
83.0	5.302	0.577	1080.012	.045%	99.682%
84.0	5.175	0.564	1080.576	.044%	99.734%
85.0	5.055	0.552	1081.128	.043%	99.785%
86.0	4.929	0.539	1081.668	.042%	99.835%
87.0	4.788	0.524	1082.192	.041%	99.883%
88.0	4.669	0.512	1082.704	.040%	99.931%
89.0	4.584	0.503	1083.206	.039%	99.977%
90.0	4.528	0.248	1083.455	.019%	100.000%

Zonal flux distribution table

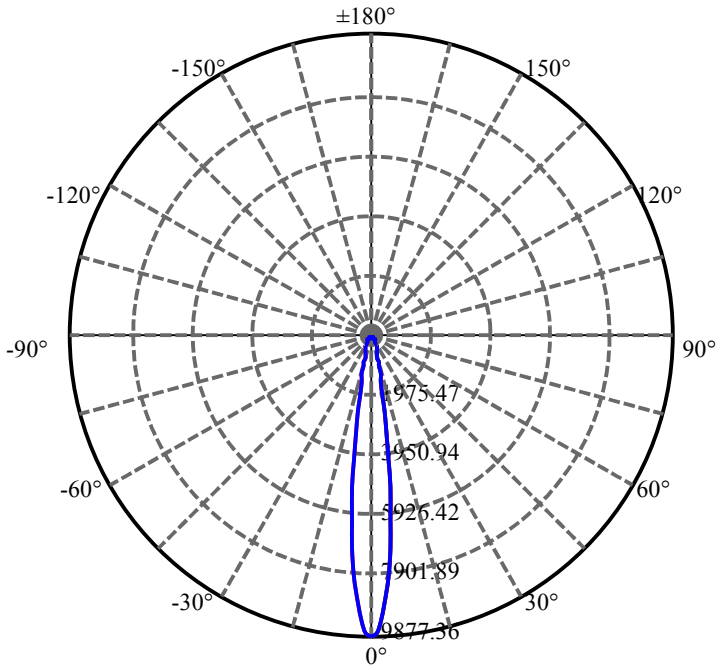
ZONAL LUMEN SUMMARY

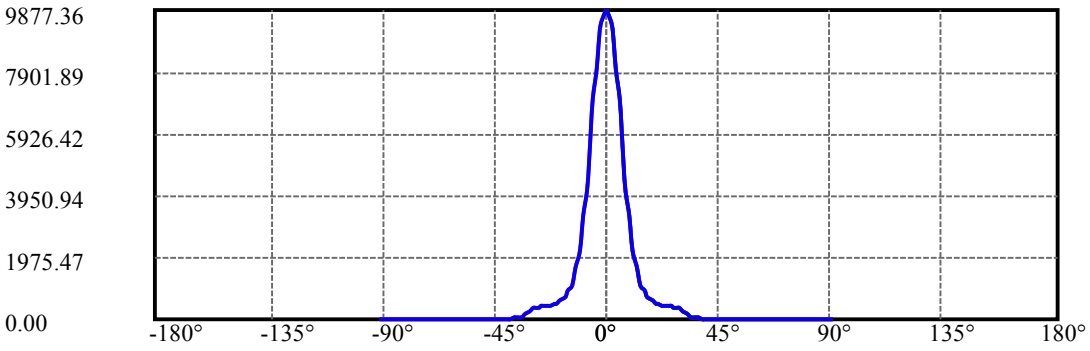
Zone	Lumens	%Lamp	%Fixt
0-30	996.94	77.58%	92.01%
0-40	1044.22	81.26%	96.38%
0-60	1063.82	82.79%	98.19%
0-90	1083.21	84.30%	99.98%
0-120	1083.21	84.30%	99.98%
0-180	1083.45	84.32%	100.00%
60-90	20.20	1.57%	1.86%
90-120	0.00	0.00%	0.00%
90-130	0.00	0.00%	0.00%
90-150	0.00	0.00%	0.00%
90-180	0.00	0.00%	0.00%
0-23.06	866.76	67.45%	80.00%

ZONAL LUMEN SUMMARY

0-10	540.13
10-20	269.15
20-30	187.66
30-40	47.28
40-50	11.25
50-60	8.35
60-70	7.83
70-80	6.60
80-90	4.96
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):

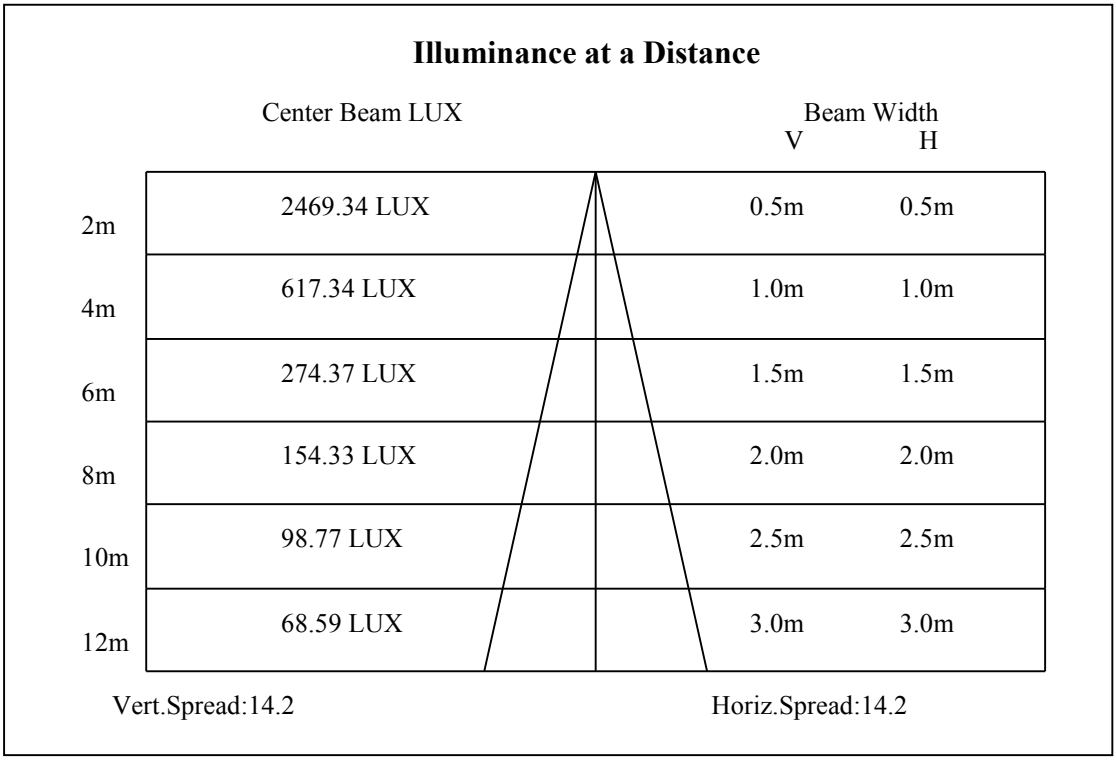
C0/C180:

C90/C270:

Field angle(10%Imax):C0/180Left:14.5 Right:14.5
:C90/270Left:14.5 Right:14.5

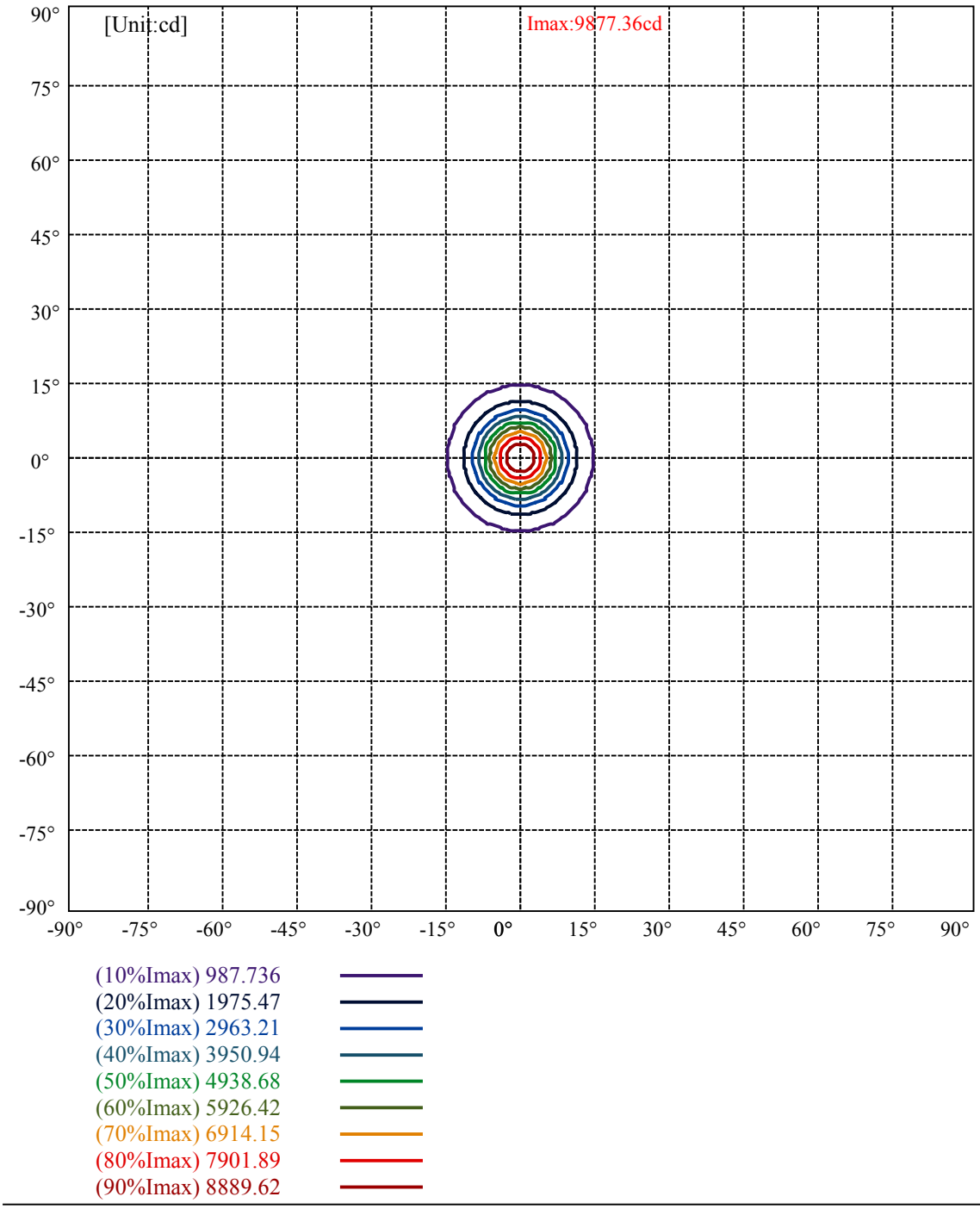
Beam Angle(50%Imax):C0/180Left:7.1 Right:7.1
:C90/270Left:7.1 Right:7.1

Lux distance Curve



Equipment: GMS1980 Date: 2019/1/18 Operator: NT07
Temperature(°C): 10.0 Humidity(%): 65.0% Distance(m): 7.50

ISO-Intensity(V-H)

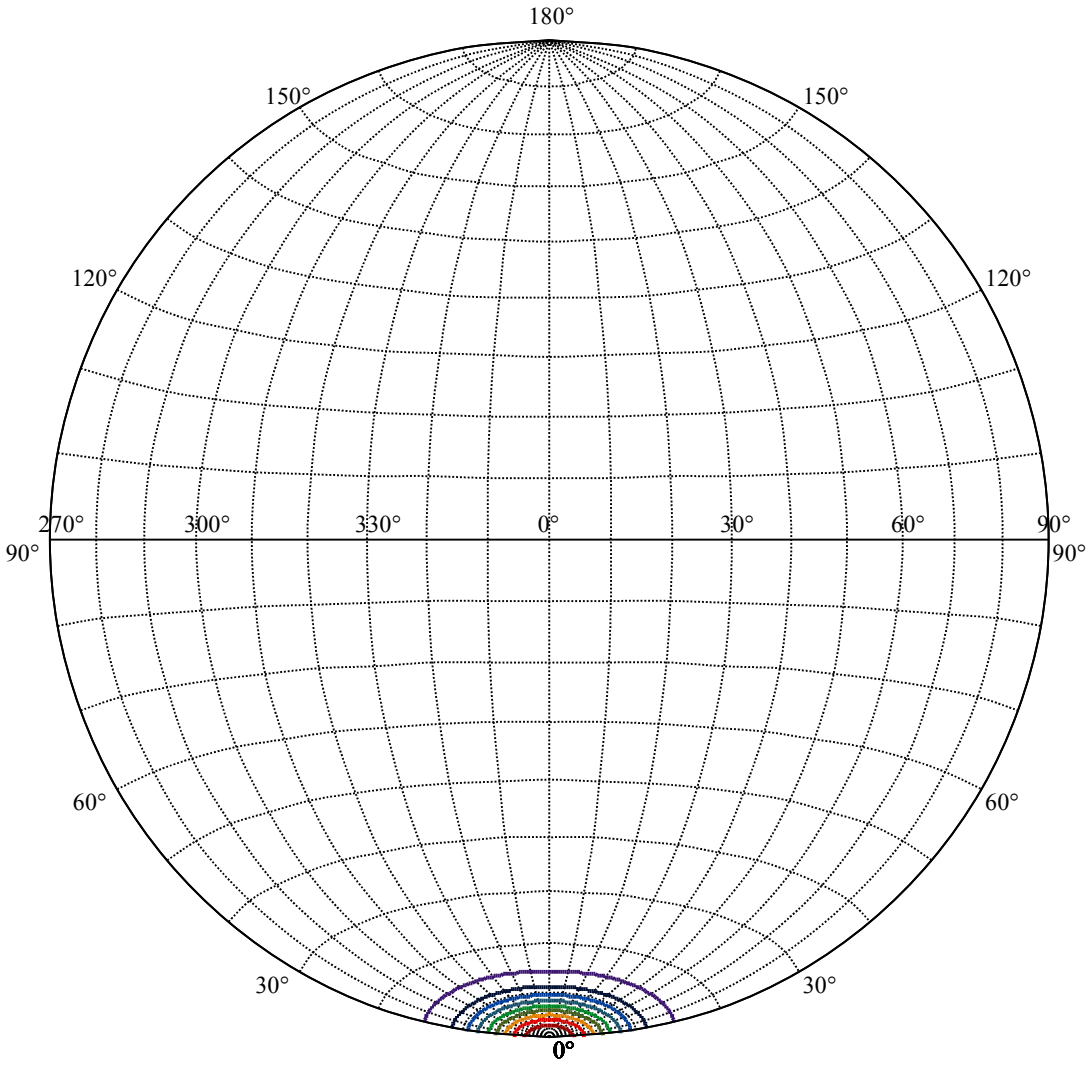


Equipment: GMS1980
Temperature(°C): 10.0

Date: 2019/1/18
Humidity(%): 65.0%

Operator: NT07
Distance(m): 7.50

ISO candela diagram on circular web



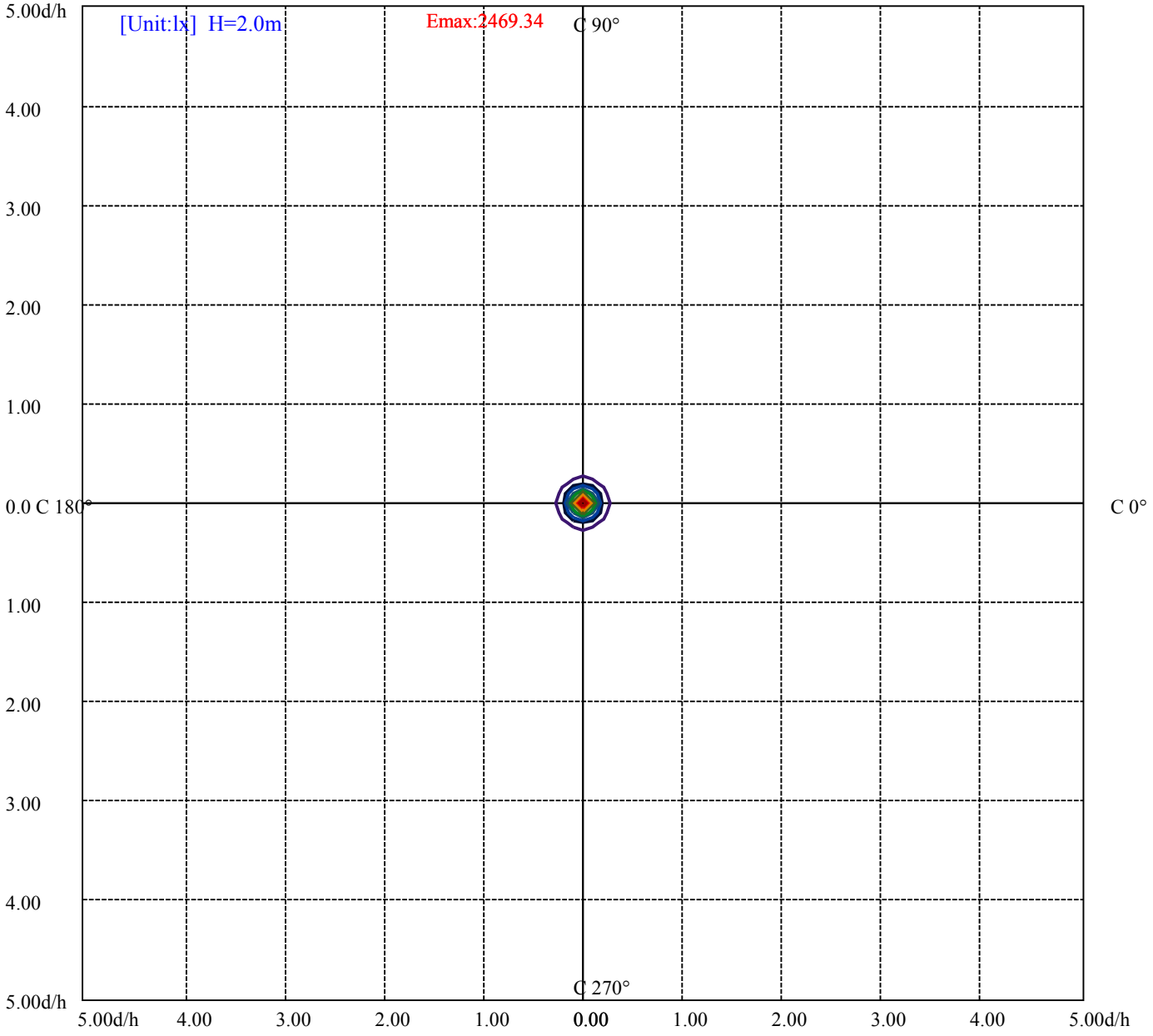
House [Unit:cd] Road

Imax:9877.36

(10%Imax) 987.736
(20%Imax) 1975.47
(30%Imax) 2963.21
(40%Imax) 3950.94
(50%Imax) 4938.68
(60%Imax) 5926.42
(70%Imax) 6914.15
(80%Imax) 7901.89
(90%Imax) 8889.62

Equipment: GMS1980 Date: 2019/1/18 Operator: NT07
Temperature(°C): 10.0 Humidity(%): 65.0% Distance(m): 7.50

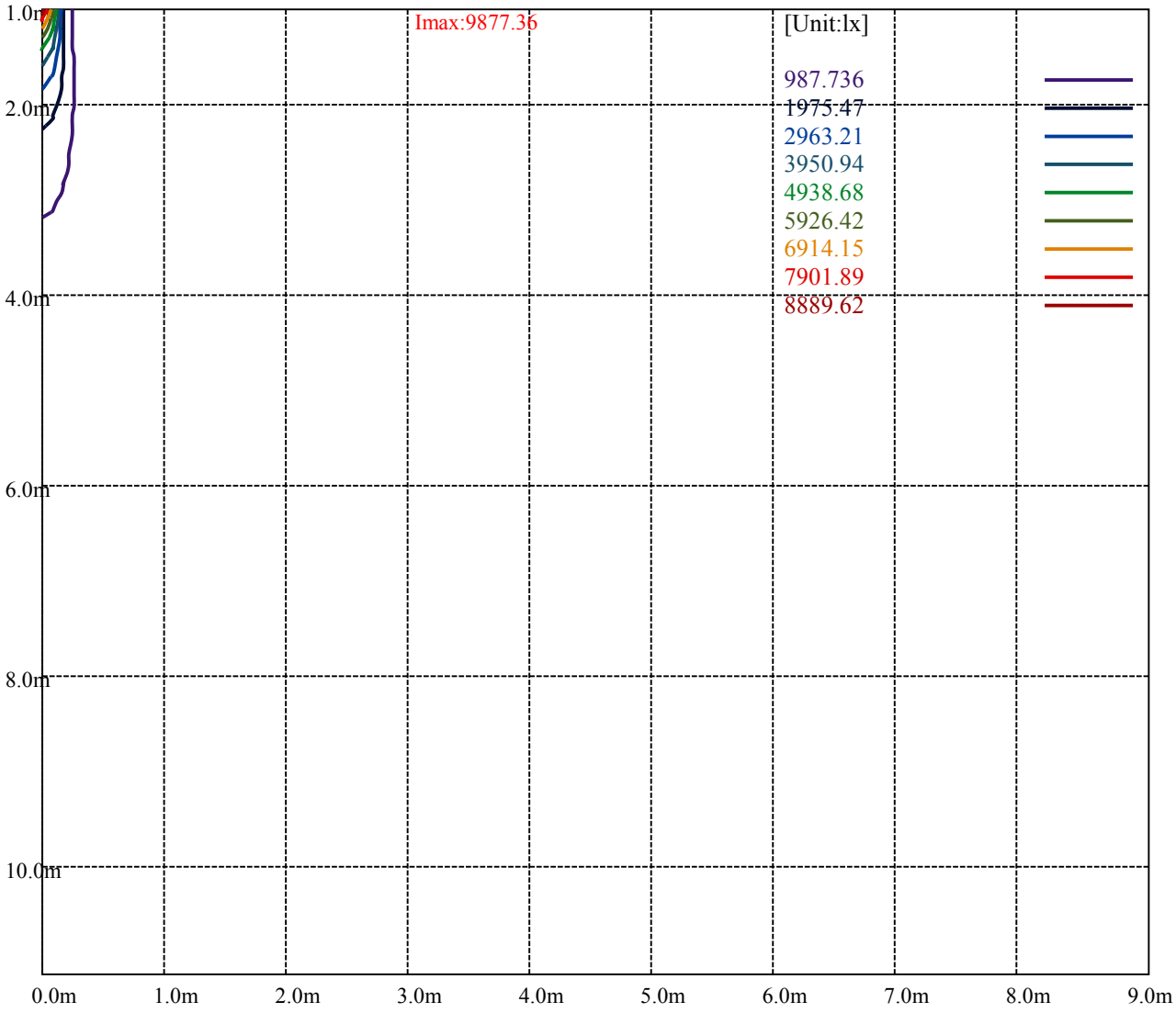
ISO illuminance diagram



(10%Emax) 246.9335
(20%Emax) 493.8675
(30%Emax) 740.8
(40%Emax) 987.735
(50%Emax) 1234.667
(60%Emax) 1481.6
(70%Emax) 1728.535
(80%Emax) 1975.468
(90%Emax) 2222.403

Equipment: GMS1980
Temperature(°C): 10.0
Date: 2019/1/18
Humidity(%): 65.0%
Operator: NT07
Distance(m): 7.50

Space ISO Lux diagram



Equipment: GMS1980
Temperature(°C): 10.0

Date: 2019/1/18
Humidity(%): 65.0%

Operator: NT07
Distance(m): 7.50

Luminance Limitting Curve(no luminous side)

Luminance Table

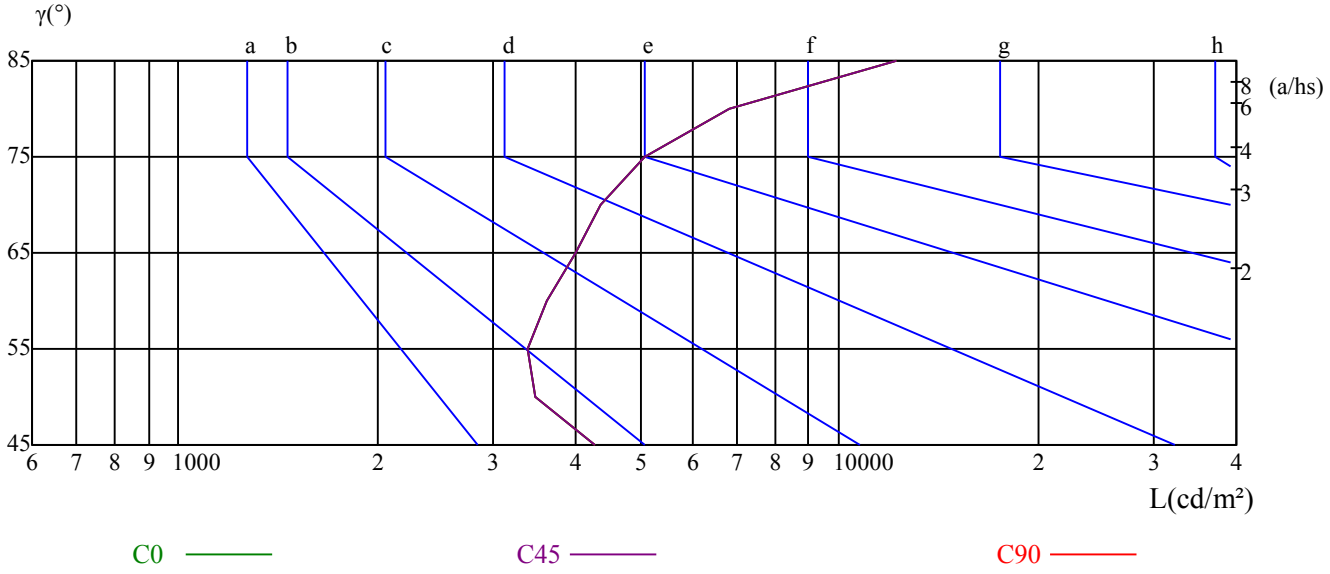
γ	45	50	55	60	65	70	75	80	85
C0	4279	3479	3386	3612	3984	4344	5090	6812	12183
C45	4279	3479	3386	3612	3984	4344	5090	6812	12183
C90	4279	3479	3386	3612	3984	4344	5090	6812	12183

L(Hor)(65)	L(Ver)(65)	L45(65)	L(Hor)(75)	L(Ver)(75)	L45(75)	L(Hor)(85)	L(Ver)(85)	L45(85)
3984	3984	3984	5090	5090	5090	12183	12183	12183

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



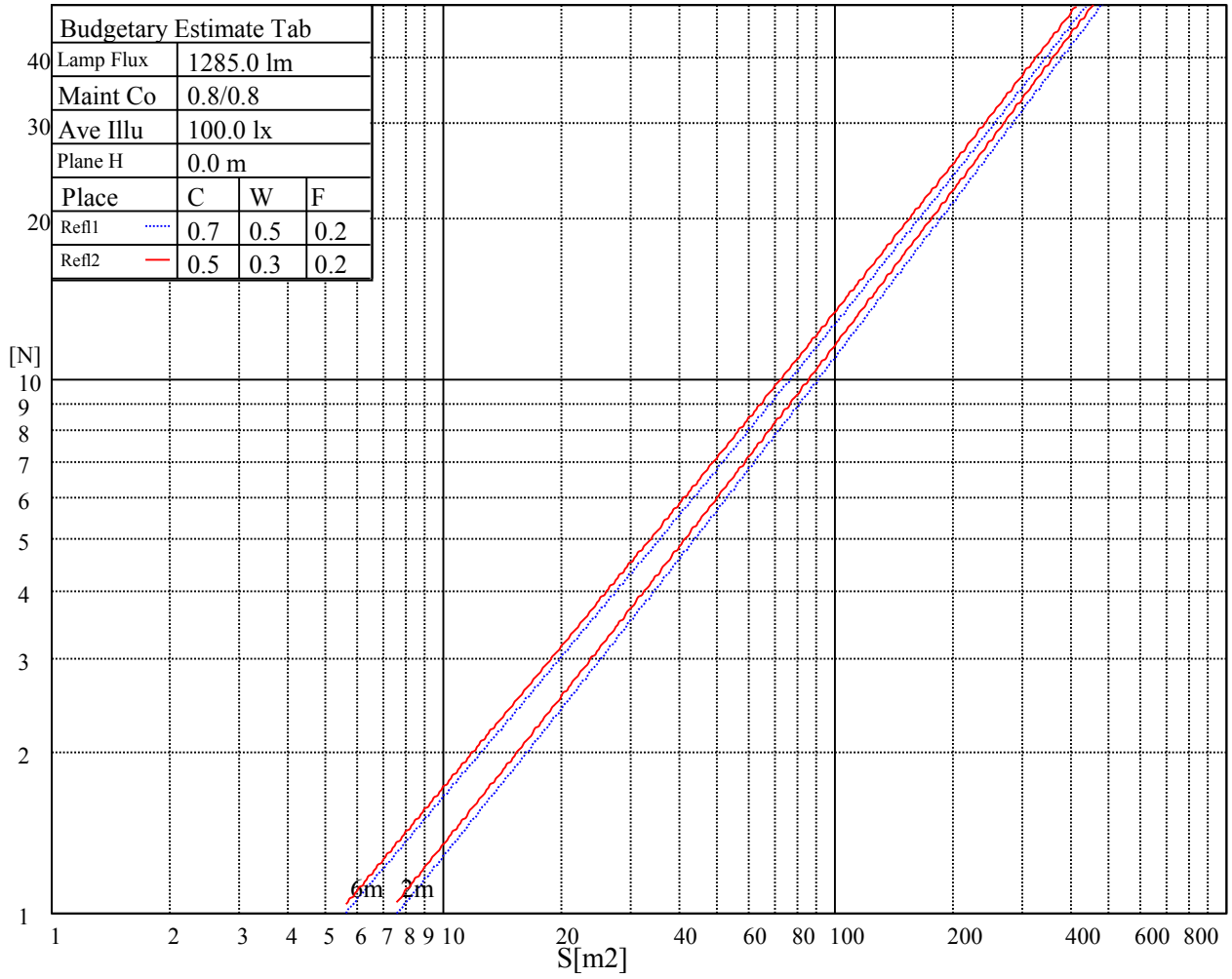
Equipment: GMS1980 Date: 2019/1/18 Operator: NT07
Temperature(°C): 10.0 Humidity(%): 65.0% Distance(m): 7.50

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	6.75	7.68	7.12	7.99	8.31	6.72	7.65	7.09	7.96	8.28
	3H	9.42	10.25	9.81	10.58	10.95	9.43	10.25	9.81	10.58	10.95
	4H	10.72	11.48	11.13	11.83	12.22	10.76	11.52	11.17	11.87	12.26
	6H	12.15	12.84	12.57	13.22	13.62	12.21	12.90	12.63	13.28	13.67
	8H	12.93	13.58	13.37	13.97	14.39	13.00	13.65	13.44	14.05	14.46
	12H	14.24	14.86	14.67	15.24	15.68	14.34	14.96	14.78	15.35	15.78
4H	2H	7.56	8.32	7.97	8.67	9.07	7.54	8.30	7.95	8.65	9.04
	3H	10.43	11.06	10.85	11.47	11.87	10.44	11.06	10.85	11.47	11.88
	4H	11.89	12.44	12.33	12.87	13.32	11.93	12.48	12.37	12.91	13.36
	6H	13.40	13.87	13.87	14.32	14.80	13.45	13.93	13.93	14.38	14.86
	8H	14.30	14.75	14.78	15.20	15.68	14.37	14.82	14.85	15.27	15.75
	12H	15.59	15.97	16.08	16.46	16.94	15.69	16.07	16.18	16.56	17.04
8H	4H	12.44	12.88	12.92	13.34	13.81	12.47	12.92	12.95	13.37	13.84
	6H	14.25	14.59	14.76	15.10	15.59	14.29	14.64	14.80	15.14	15.63
	8H	15.34	15.65	15.87	16.17	16.67	15.40	15.71	15.93	16.23	16.73
	12H	16.86	17.12	17.38	17.62	18.20	16.94	17.21	17.47	17.71	18.29
12H	4H	12.57	12.95	13.06	13.44	13.92	12.60	12.98	13.09	13.47	13.95
	6H	14.70	14.80	15.03	15.27	15.82	14.75	14.84	15.07	15.31	15.86
	8H	15.71	15.98	16.23	16.47	17.06	15.76	16.03	16.29	16.53	17.11

Variation with the observer position at spacings:		
S = 1.0H	3.4/-1.8	3.4/-1.8
S = 1.5H	4.2/-1.6	4.2/-1.6
S = 2.0H	4.7/-1.2	4.7/-1.2
Standard tables:	BKBF	BKBF
Uncorrected UGR	-0.2	-0.2

Budgetary Estimate Table

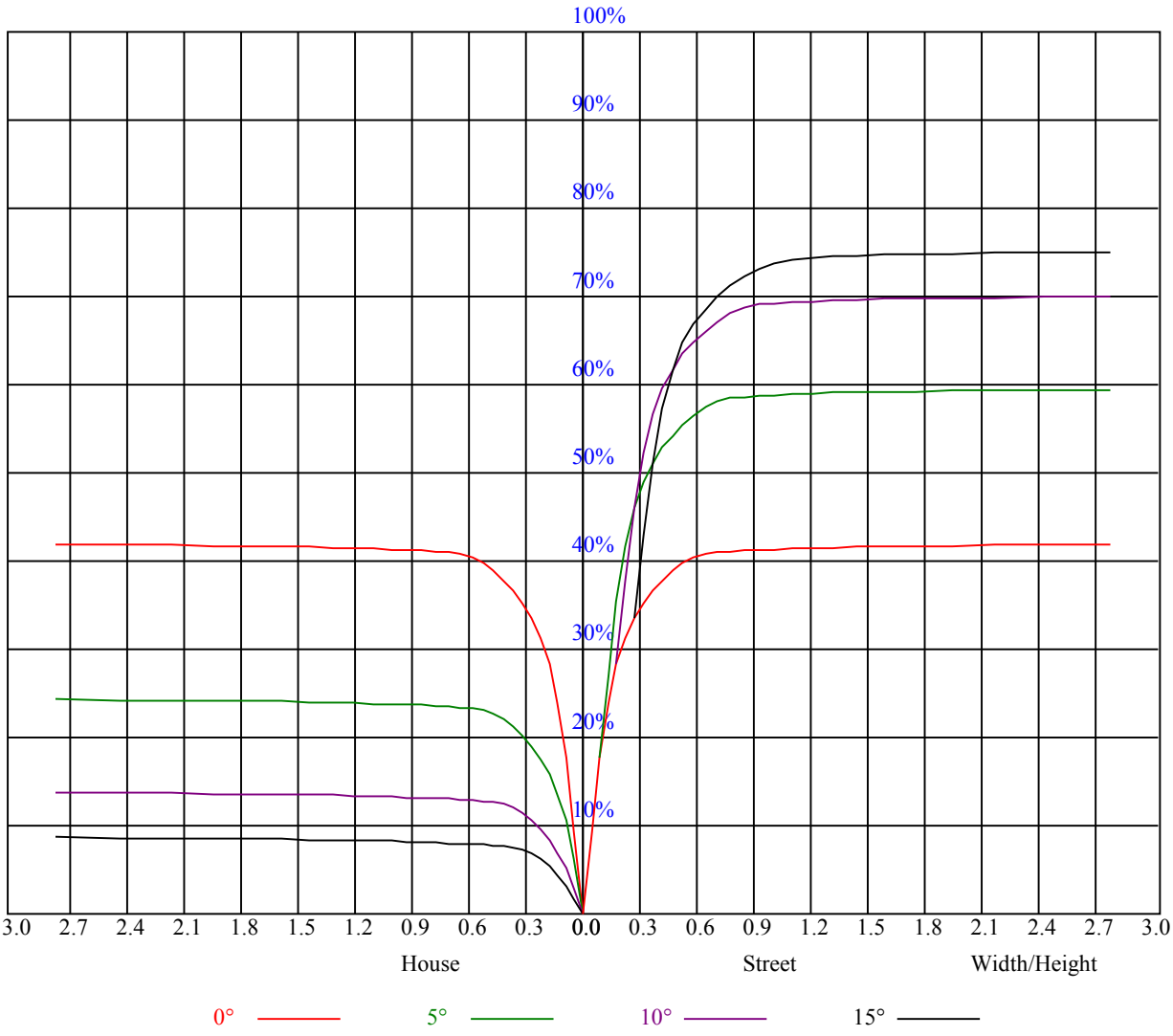


Equipment: GMS1980	Date: 2019/1/18	Operator: NT07
Temperature(°C): 10.0	Humidity(%): 65.0%	Distance(m): 7.50

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	1.01	1.01	1.01	0.98	0.98	0.98	0.94	0.94	0.94	0.90	0.90	0.90	0.86	0.86	0.86	0.84
1	0.95	0.93	0.92	0.93	0.92	0.90	0.90	0.89	0.87	0.87	0.86	0.85	0.84	0.83	0.82	0.81
2	0.90	0.88	0.86	0.89	0.87	0.85	0.86	0.85	0.83	0.84	0.82	0.81	0.82	0.81	0.79	0.78
3	0.87	0.84	0.81	0.86	0.83	0.81	0.84	0.81	0.79	0.82	0.80	0.78	0.80	0.78	0.77	0.76
4	0.84	0.80	0.78	0.83	0.80	0.77	0.81	0.78	0.76	0.79	0.77	0.75	0.78	0.76	0.75	0.74
5	0.81	0.77	0.75	0.80	0.77	0.74	0.79	0.76	0.74	0.77	0.75	0.73	0.76	0.74	0.73	0.72
6	0.78	0.75	0.72	0.78	0.74	0.72	0.76	0.74	0.72	0.75	0.73	0.71	0.74	0.72	0.71	0.70
7	0.76	0.73	0.70	0.75	0.72	0.70	0.75	0.72	0.70	0.74	0.71	0.69	0.73	0.71	0.69	0.68
8	0.74	0.71	0.68	0.74	0.70	0.68	0.73	0.70	0.68	0.72	0.69	0.68	0.71	0.69	0.67	0.67
9	0.72	0.69	0.67	0.72	0.69	0.66	0.71	0.68	0.66	0.70	0.68	0.66	0.70	0.68	0.66	0.65
10	0.70	0.67	0.65	0.70	0.67	0.65	0.70	0.67	0.65	0.69	0.66	0.65	0.69	0.66	0.65	0.64

Coefficient Utilization Curve



Equipment: GMS1980
Temperature(°C): 10.0

Date: 2019/1/18
Humidity(%): 65.0%

Operator: NT07
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	9804.94	10023.75	9957.38	9591.19	9054.56	8241.75	7248.94	6300.56	5371.31
45.0	9987.75	9810.56	9360.56	8805.38	8012.81	7048.69	6114.94	5031.56	4164.75
90.0	9765.56	9392.06	8826.75	7913.25	7054.31	6105.94	5018.06	4014.00	3243.94
135.0	9951.19	9588.38	8995.50	8295.19	7349.63	6292.13	5326.31	4321.69	3535.31
180.0	9804.94	9304.31	8683.31	7802.44	6770.81	5811.19	4871.81	3798.00	3069.00
225.0	9987.75	9821.25	9433.13	8701.31	7939.13	7033.50	5929.31	4877.44	4011.19
270.0	9765.56	10011.94	9842.06	9528.19	8805.38	7902.00	6971.06	5883.75	4946.63
315.0	9951.19	10054.13	9866.81	9392.63	8641.69	7817.63	6870.38	5671.13	4727.25
360.0	9804.94	10023.75	9957.38	9591.19	9054.56	8241.75	7248.94	6300.56	5371.31

C/γ(°)	9.0	10.0	11.0	12.0	13.0	14.0	15.0	16.0	17.0
0.0	4282.88	3503.25	2831.63	2212.88	1736.44	1413.56	1134.00	924.75	789.19
45.0	3312.00	2594.25	2090.81	1688.06	1314.00	1089.56	916.88	756.56	663.19
90.0	2596.50	1973.81	1602.00	1111.05	1058.34	866.31	737.72	632.93	565.26
135.0	2783.25	2177.44	1758.38	1467.56	1116.56	929.81	802.69	662.63	595.13
180.0	2460.94	1878.75	1530.56	1113.98	996.53	843.02	725.85	622.52	569.19
225.0	3166.31	2474.44	1986.75	1564.88	1108.74	1038.26	878.74	745.48	659.19
270.0	3976.88	3137.63	2516.63	2018.25	1545.19	1260.00	1044.56	842.06	724.50
315.0	3857.63	2949.75	2363.63	1896.75	1499.63	1097.21	1003.05	836.72	728.78
360.0	4282.88	3503.25	2831.63	2212.88	1736.44	1413.56	1134.00	924.75	789.19

C/γ(°)	18.0	19.0	20.0	21.0	22.0	23.0	24.0	25.0	26.0
0.0	682.31	614.81	561.38	522.00	496.69	473.06	453.94	440.44	428.06
45.0	596.81	545.06	506.25	479.25	456.19	437.63	422.44	410.63	400.50
90.0	512.55	475.48	452.08	431.38	414.96	403.99	388.97	374.12	365.40
135.0	551.81	509.63	482.06	464.63	445.50	429.19	419.06	406.13	398.25
180.0	521.21	483.13	463.39	444.83	427.73	416.76	404.61	390.26	382.61
225.0	586.58	543.83	512.04	482.29	462.26	443.98	429.36	414.45	403.26
270.0	641.25	573.19	525.38	492.75	466.31	446.63	430.88	417.38	407.81
315.0	640.07	578.42	538.14	505.07	479.98	462.38	447.92	433.46	423.39
360.0	682.31	614.81	561.38	522.00	496.69	473.06	453.94	440.44	428.06

C/γ(°)	27.0	28.0	29.0	30.0	31.0	32.0	33.0	34.0	35.0
0.0	416.25	406.69	396.56	380.25	333.00	288.56	209.31	121.22	71.66
45.0	390.94	380.25	363.38	313.31	290.25	168.02	108.79	54.39	38.87
90.0	355.56	326.48	277.48	221.85	158.46	97.03	56.76	38.87	34.48
135.0	390.94	374.63	332.44	287.44	181.18	115.54	63.96	38.19	34.14
180.0	374.91	343.18	284.91	220.50	145.41	81.28	46.24	35.83	32.06
225.0	394.48	384.75	361.63	311.57	242.94	171.28	108.17	55.01	38.25
270.0	396.56	387.00	379.13	361.69	302.63	288.00	174.38	100.46	56.64
315.0	413.04	397.41	383.23	352.80	291.09	216.79	151.43	82.80	52.14
360.0	416.25	406.69	396.56	380.25	333.00	288.56	209.31	121.22	71.66

C/γ(°)	36.0	37.0	38.0	39.0	40.0	41.0	42.0	43.0	44.0
0.0	47.08	37.18	32.68	29.87	26.10	23.51	21.66	19.35	17.72
45.0	34.71	31.33	27.56	24.75	22.39	20.42	18.56	17.04	15.64
90.0	30.77	27.84	25.43	23.01	21.15	19.35	17.66	15.86	14.63
135.0	30.88	27.90	24.86	22.61	20.98	19.01	17.33	15.92	14.74
180.0	28.74	25.09	22.44	20.70	18.51	17.04	15.75	14.23	13.33
225.0	33.53	29.81	26.49	23.23	21.04	19.24	17.66	15.86	14.57
270.0	37.97	33.30	29.98	27.28	24.53	22.61	20.70	18.56	17.16
315.0	38.87	34.54	30.99	27.73	24.81	22.56	20.70	18.68	17.10
360.0	47.08	37.18	32.68	29.87	26.10	23.51	21.66	19.35	17.72

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	16.14	14.68	13.78	12.83	11.87	11.36	10.74	10.35	10.01
45.0	14.23	13.39	12.38	11.64	11.08	10.52	10.13	9.73	9.51
90.0	13.78	12.66	11.98	11.48	10.86	10.46	10.07	9.79	9.56
135.0	13.56	12.66	11.87	11.48	10.80	10.41	10.13	9.79	9.51
180.0	12.43	11.70	11.19	10.63	10.24	9.90	9.62	9.39	9.23
225.0	13.56	12.49	11.64	11.14	10.58	10.13	9.84	9.45	9.28
270.0	15.64	14.29	13.33	12.43	11.76	11.08	10.69	10.24	9.96
315.0	15.92	14.51	13.56	12.71	11.98	11.31	10.86	10.46	10.13
360.0	16.14	14.68	13.78	12.83	11.87	11.36	10.74	10.35	10.01

C/γ(°)	54.0	55.0	56.0	57.0	58.0	59.0	60.0	61.0	62.0
0.0	9.73	9.45	9.23	9.11	8.94	8.83	8.72	8.61	8.55
45.0	9.34	9.11	8.94	8.83	8.66	8.55	8.44	8.38	8.33
90.0	9.39	9.17	9.00	8.89	8.72	8.61	8.49	8.33	8.27
135.0	9.39	9.28	9.17	9.06	8.89	8.83	8.66	8.55	8.49
180.0	9.06	8.94	8.83	8.72	8.61	8.55	8.38	8.38	8.38
225.0	9.06	8.94	8.83	8.78	8.61	8.49	8.44	8.38	8.27
270.0	9.62	9.45	9.28	9.11	9.06	8.89	8.78	8.72	8.55
315.0	9.79	9.62	9.45	9.28	9.06	9.00	8.89	8.72	8.61
360.0	9.73	9.45	9.23	9.11	8.94	8.83	8.72	8.61	8.55

C/γ(°)	63.0	64.0	65.0	66.0	67.0	68.0	69.0	70.0	71.0
0.0	8.44	8.38	8.21	8.10	7.88	7.71	7.48	7.31	7.09
45.0	8.21	8.10	7.88	7.71	7.48	7.31	7.20	6.98	6.81
90.0	8.16	7.93	7.71	7.54	7.31	7.20	6.98	6.86	6.69
135.0	8.44	8.21	8.04	7.82	7.54	7.37	7.20	7.03	6.86
180.0	8.16	7.99	7.82	7.54	7.43	7.20	7.03	6.92	6.75
225.0	8.33	8.16	7.93	7.76	7.54	7.31	7.14	6.98	6.81
270.0	8.49	8.44	8.21	8.04	7.88	7.59	7.43	7.26	7.03
315.0	8.55	8.44	8.33	8.10	7.88	7.65	7.48	7.26	7.09
360.0	8.44	8.38	8.21	8.10	7.88	7.71	7.48	7.31	7.09

C/γ(°)	72.0	73.0	74.0	75.0	76.0	77.0	78.0	79.0	80.0
0.0	6.98	6.81	6.64	6.53	6.36	6.19	6.08	6.02	5.85
45.0	6.64	6.53	6.36	6.13	6.02	5.91	5.79	5.68	5.57
90.0	6.53	6.30	6.19	6.08	5.96	5.79	5.74	5.57	5.46
135.0	6.69	6.53	6.36	6.19	6.08	5.91	5.79	5.68	5.51
180.0	6.58	6.47	6.30	6.19	6.08	5.91	5.79	5.68	5.57
225.0	6.58	6.41	6.36	6.19	6.08	5.96	5.85	5.68	5.57
270.0	6.92	6.69	6.58	6.41	6.30	6.13	6.02	5.91	5.79
315.0	6.92	6.75	6.58	6.47	6.24	6.13	6.02	5.91	5.74
360.0	6.98	6.81	6.64	6.53	6.36	6.19	6.08	6.02	5.85

C/γ(°)	81.0	82.0	83.0	84.0	85.0	86.0	87.0	88.0	89.0
0.0	5.74	5.57	5.51	5.40	5.23	5.18	5.06	4.95	4.78
45.0	5.46	5.34	5.23	5.12	5.01	4.95	4.78	4.67	4.56
90.0	5.40	5.29	5.18	5.01	4.84	4.73	4.61	4.50	4.50
135.0	5.46	5.29	5.18	5.06	4.95	4.78	4.67	4.56	4.50
180.0	5.46	5.34	5.23	5.12	5.06	4.84	4.67	4.50	4.50
225.0	5.51	5.40	5.23	5.12	5.01	4.89	4.73	4.67	4.56
270.0	5.63	5.51	5.46	5.29	5.18	5.01	4.84	4.67	4.61
315.0	5.63	5.51	5.40	5.29	5.18	5.06	4.95	4.84	4.67
360.0	5.74	5.57	5.51	5.40	5.23	5.18	5.06	4.95	4.78

Intensity data(cd)

C/γ(°)	90.0
0.0	4.67
45.0	4.50
90.0	4.50
135.0	4.50
180.0	4.50
225.0	4.50
270.0	4.50
315.0	4.56
360.0	4.67