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

Nata

LumCAT: 4-2219-A
Luminaire: BJB47.319.2030
Report No: NT2017092005
Test No: GC2017092005
LampCAT: LUMILEDS 1216
Lamp flux(lm): 4061.0
Number of Lamps: 1
Length(mm): 100
Phm Type: C

Voltage(V): 34.1000
Current(A): 0.8000
Power (W): 27.2800
PF: 0.0000
Ballast type: DC
Width(mm): 100
Height(mm): 0

Photometric Results

Lumens(lm): 3634.78
Efficiency(%): 89.50%
Lumens(lm)/Power(W): 133.24
Central intensity(cd): 9841.194
Maximum intensity(cd): 9841.194
Angle of maximum intensity: C=0.0 γ=0.0
Beam Angle(50%Imax): [C0/180]Total=21.7
[C90/270]Total=21.7
Field angle(10%Imax): [C0/180]Total=70.3
[C90/270]Total=70.3
Maximum s/h(1/2): C0_180=0.36 C90_270=0.36
Maximum s/h(1/4): C0_180=0.53 C90_270=0.53
Up flux rate of lamp(%): 0.00%
Down flux rate of lamp(%): 89.56%
Up flux rate of LUM(%): - -
Down flux rate of LUM(%): 100.00%
CIE Type : Direct lighting
Output flux ratio in π solid angle : 98.643%

Zonal flux distribution table

γ(°)	Average I(cd)	Zonal F(lm)	Sum F(lm)	Eff Flux(%)	Eff Sum(%)
0.0	9841.194	2.354	2.354	.058%	.065%
1.0	9793.845	18.744	21.098	.462%	.580%
2.0	9662.811	36.981	58.079	.911%	1.598%
3.0	9429.028	54.115	112.194	1.333%	3.087%
4.0	9126.699	69.815	182.009	1.719%	5.007%
5.0	8735.868	83.494	265.503	2.056%	7.305%
6.0	8171.333	93.665	359.168	2.306%	9.881%
7.0	7494.621	100.160	459.329	2.466%	12.637%
8.0	6802.494	103.819	563.147	2.556%	15.493%
9.0	6033.906	103.510	666.658	2.549%	18.341%
10.0	5333.795	101.568	768.226	2.501%	21.135%
11.0	4843.656	101.350	869.576	2.496%	23.924%
12.0	4475.122	102.032	971.608	2.512%	26.731%
13.0	4162.952	102.693	1074.301	2.529%	29.556%
14.0	3963.579	105.151	1179.452	2.589%	32.449%
15.0	3790.771	107.591	1287.043	2.649%	35.409%
16.0	3609.498	109.103	1396.146	2.687%	38.411%
17.0	3448.595	110.568	1506.714	2.723%	41.453%
18.0	3309.578	112.152	1618.866	2.762%	44.538%
19.0	3163.197	112.933	1731.798	2.781%	47.645%
20.0	3031.543	113.702	1845.5	2.800%	50.773%
21.0	2907.941	114.279	1959.779	2.814%	53.917%
22.0	2788.538	114.552	2074.331	2.821%	57.069%
23.0	2686.133	115.095	2189.427	2.834%	60.236%
24.0	2573.405	114.782	2304.209	2.826%	63.393%
25.0	2453.244	113.695	2417.903	2.800%	66.521%
26.0	2346.710	112.811	2530.715	2.778%	69.625%
27.0	2236.253	111.332	2642.047	2.741%	72.688%
28.0	2102.673	108.251	2750.298	2.666%	75.666%
29.0	1993.661	105.992	2856.29	2.610%	78.582%
30.0	1875.565	102.838	2959.128	2.532%	81.412%
31.0	1696.976	95.844	3054.973	2.360%	84.048%
32.0	1530.774	88.955	3143.928	2.190%	86.496%
33.0	1357.994	81.107	3225.035	1.997%	88.727%
34.0	1143.232	70.105	3295.14	1.726%	90.656%
35.0	1004.442	63.178	3358.318	1.556%	92.394%
36.0	844.063	54.406	3412.724	1.340%	93.891%
37.0	665.680	43.932	3456.656	1.082%	95.100%

Zonal flux distribution table

γ(°)	Average I(cd)	Zonal F(lm)	Sum F(lm)	Eff Flux(%)	Eff Sum(%)
38.0	516.821	34.893	3491.549	.859%	96.059%
39.0	372.491	25.706	3517.255	.633%	96.767%
40.0	244.726	17.250	3534.505	.425%	97.241%
41.0	149.588	10.762	3545.267	.265%	97.537%
42.0	88.847	6.519	3551.787	.161%	97.717%
43.0	58.649	4.386	3556.173	.108%	97.837%
44.0	45.332	3.453	3559.626	.085%	97.932%
45.0	37.349	2.896	3562.522	.071%	98.012%
46.0	31.630	2.495	3565.017	.061%	98.081%
47.0	28.182	2.260	3567.278	.056%	98.143%
48.0	24.872	2.027	3569.304	.050%	98.199%
49.0	21.596	1.787	3571.092	.044%	98.248%
50.0	19.387	1.629	3572.72	.040%	98.293%
51.0	18.107	1.543	3574.263	.038%	98.335%
52.0	17.398	1.503	3575.767	.037%	98.376%
53.0	17.012	1.490	3577.257	.037%	98.417%
54.0	16.730	1.484	3578.741	.037%	98.458%
55.0	16.462	1.479	3580.22	.036%	98.499%
56.0	16.269	1.479	3581.699	.036%	98.540%
57.0	16.090	1.480	3583.179	.036%	98.580%
58.0	15.946	1.483	3584.662	.037%	98.621%
59.0	15.829	1.488	3586.149	.037%	98.662%
60.0	15.719	1.493	3587.642	.037%	98.703%
61.0	15.622	1.498	3589.141	.037%	98.744%
62.0	15.567	1.507	3590.648	.037%	98.786%
63.0	15.512	1.516	3592.164	.037%	98.828%
64.0	15.443	1.522	3593.686	.037%	98.869%
65.0	15.409	1.531	3595.217	.038%	98.912%
66.0	15.368	1.540	3596.757	.038%	98.954%
67.0	15.333	1.548	3598.304	.038%	98.997%
68.0	15.306	1.556	3599.861	.038%	99.039%
69.0	15.285	1.565	3601.425	.039%	99.082%
70.0	15.258	1.572	3602.998	.039%	99.126%
71.0	15.244	1.581	3604.578	.039%	99.169%
72.0	15.216	1.587	3606.165	.039%	99.213%
73.0	15.209	1.595	3607.76	.039%	99.257%
74.0	15.189	1.601	3609.361	.039%	99.301%
75.0	15.182	1.608	3610.969	.040%	99.345%

Zonal flux distribution table

γ(°)	Average I(cd)	Zonal F(lm)	Sum F(lm)	Eff Flux(%)	Eff Sum(%)
76.0	15.161	1.613	3612.583	.040%	99.389%
77.0	15.154	1.619	3614.202	.040%	99.434%
78.0	15.147	1.625	3615.827	.040%	99.479%
79.0	15.141	1.630	3617.456	.040%	99.523%
80.0	15.141	1.635	3619.092	.040%	99.568%
81.0	15.154	1.641	3620.733	.040%	99.614%
82.0	15.175	1.648	3622.381	.041%	99.659%
83.0	15.168	1.651	3624.032	.041%	99.704%
84.0	15.161	1.653	3625.685	.041%	99.750%
85.0	15.154	1.656	3627.341	.041%	99.795%
86.0	15.147	1.657	3628.998	.041%	99.841%
87.0	15.113	1.655	3630.653	.041%	99.887%
88.0	15.044	1.649	3632.302	.041%	99.932%
89.0	15.058	1.651	3633.953	.041%	99.977%
90.0	15.044	0.825	3634.777	.020%	100.000%

Zonal flux distribution table

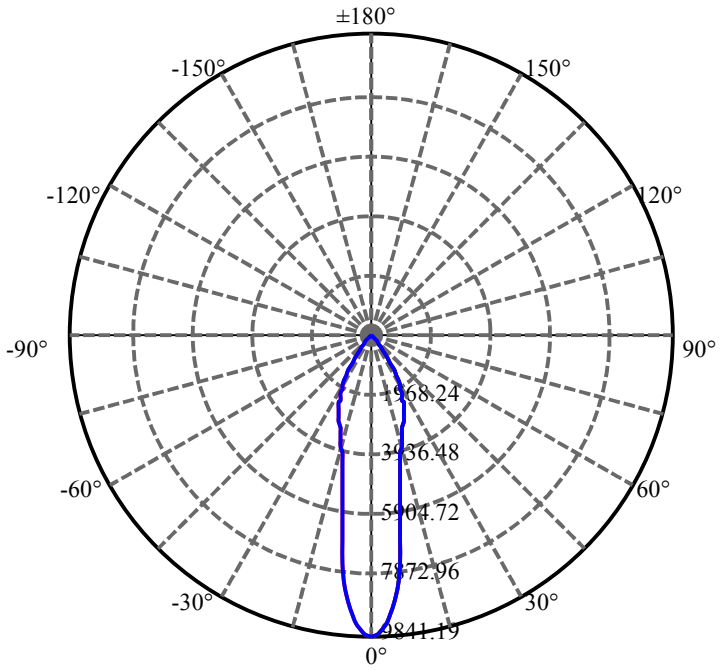
ZONAL LUMEN SUMMARY

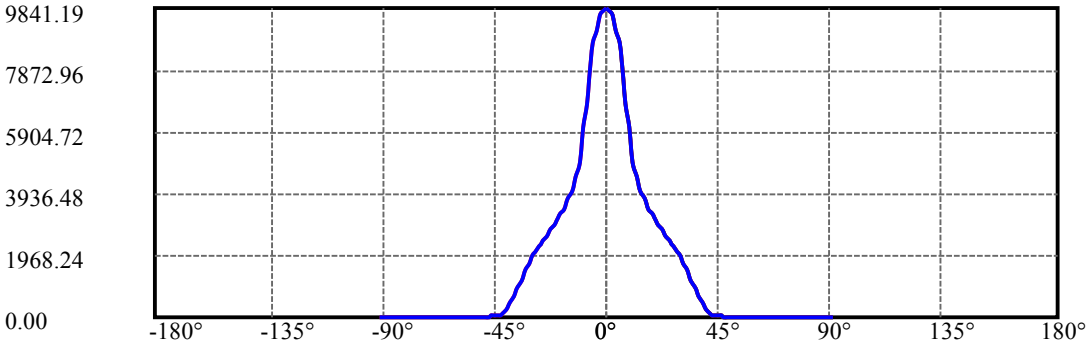
Zone	Lumens	%Lamp	%Fixt
0-30	2959.13	72.87%	81.41%
0-40	3534.51	87.04%	97.24%
0-60	3587.64	88.34%	98.70%
0-90	3633.95	89.48%	99.98%
0-120	3633.95	89.48%	99.98%
0-180	3634.78	89.50%	100.00%
60-90	47.80	1.18%	1.32%
90-120	0.00	0.00%	0.00%
90-130	0.00	0.00%	0.00%
90-150	0.00	0.00%	0.00%
90-180	0.00	0.00%	0.00%
0-29.50	2907.82	71.60%	80.00%

ZONAL LUMEN SUMMARY

0-10	768.23
10-20	1077.27
20-30	1113.63
30-40	575.38
40-50	38.22
50-60	14.92
60-70	15.36
70-80	16.09
80-90	14.86
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):

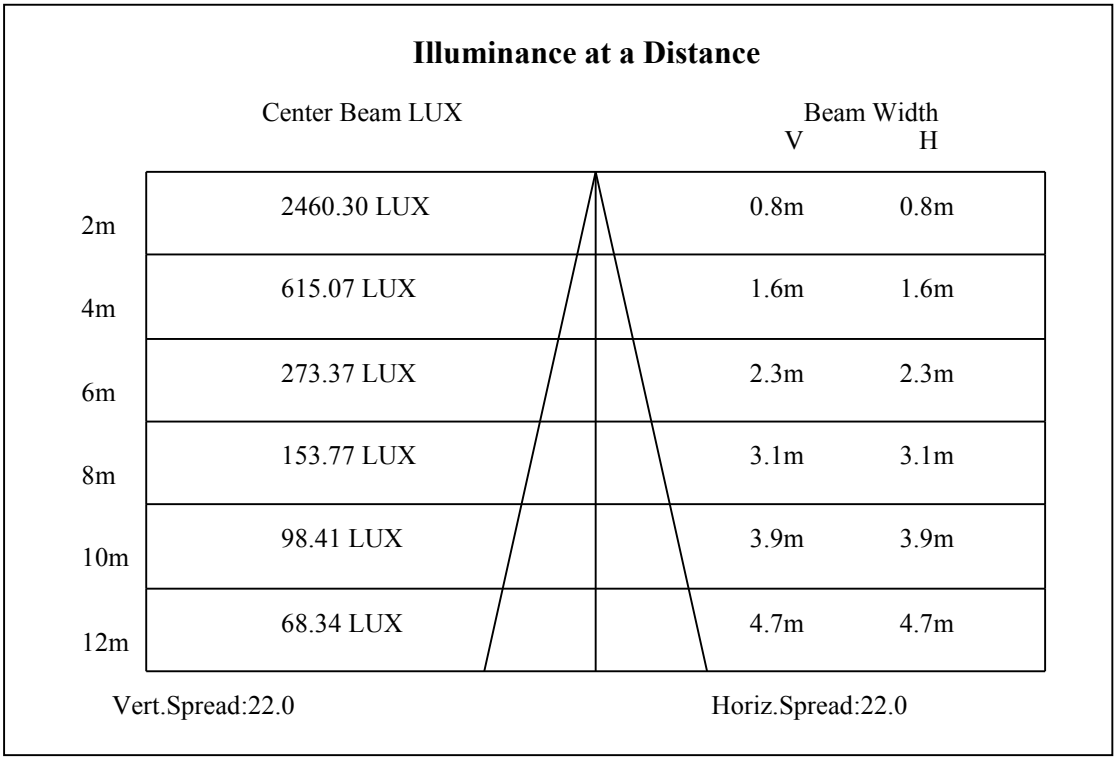
C0/C180:

C90/C270:

Field angle(10%Imax):C0/180Left:35.1 Right:35.1
:C90/270Left:35.1 Right:35.1

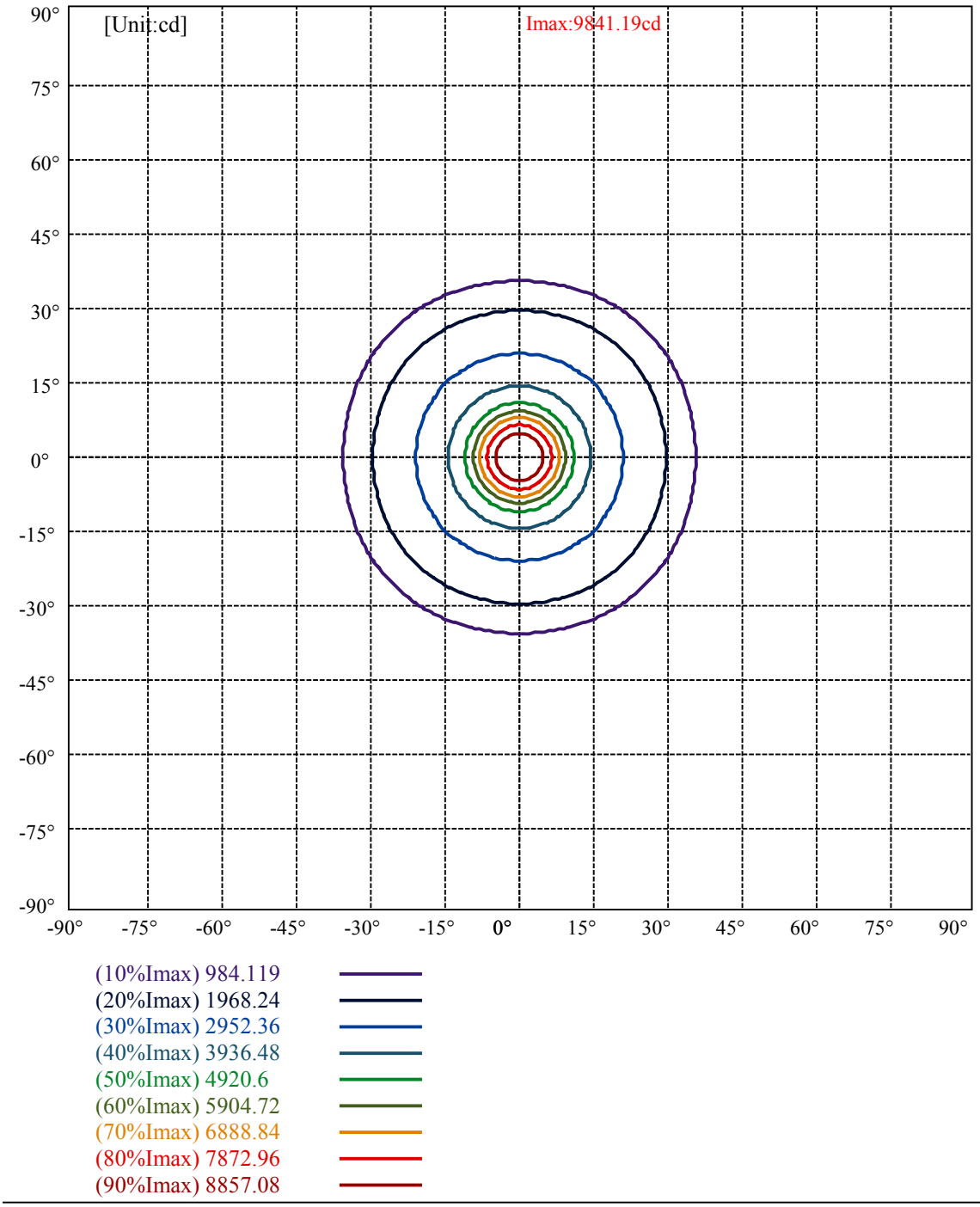
Beam Angle(50%Imax):C0/180Left:10.8 Right:10.8
:C90/270Left:10.8 Right:10.8

Lux distance Curve



Equipment: GMS1980 Date: 2017/9/20 Operator: NT07
Temperature(°C): 25.0 Humidity(%): 60.0% Distance(m): 7.42

ISO-Intensity(V-H)

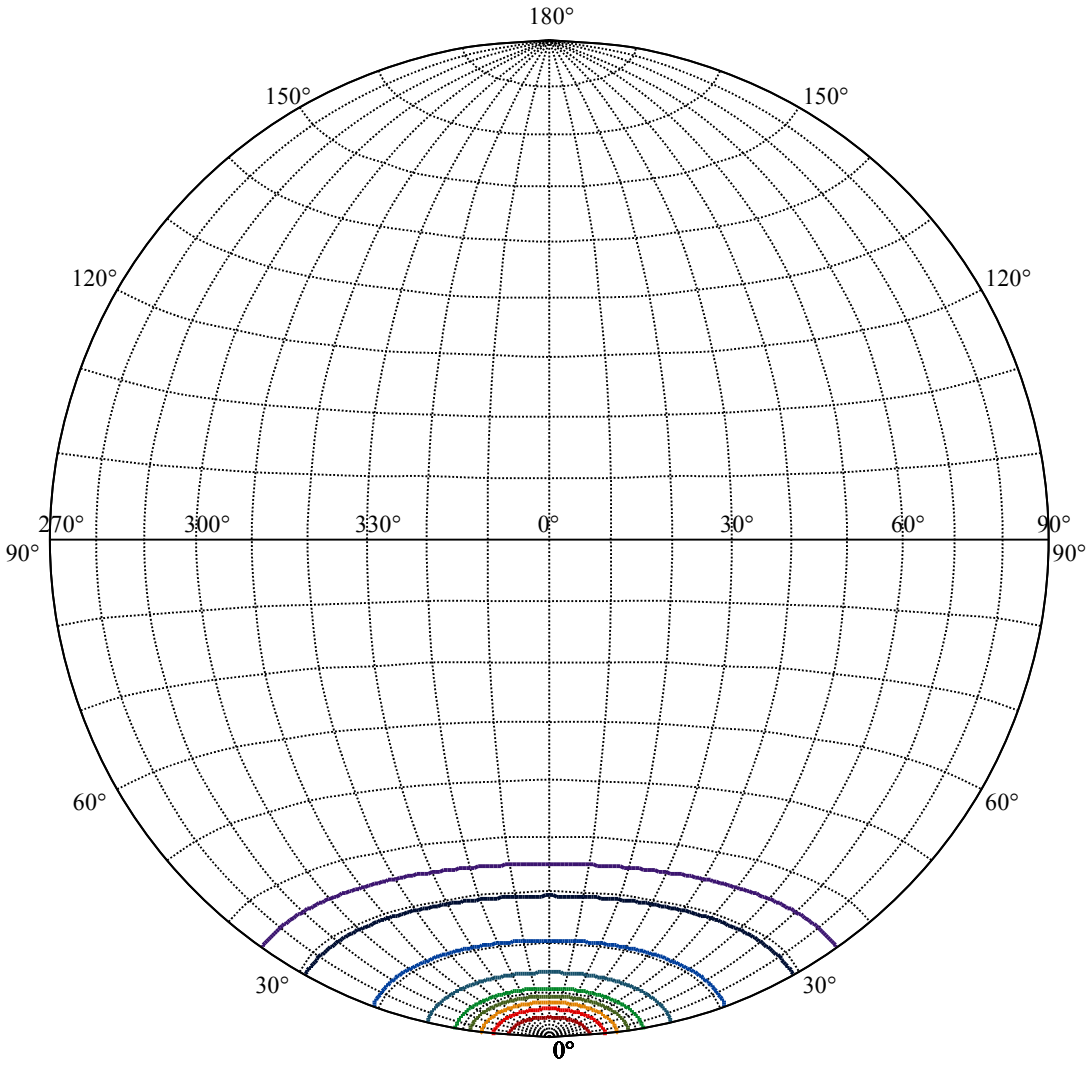


Equipment: GMS1980
Temperature(°C): 25.0

Date: 2017/9/20
Humidity(%): 60.0%

Operator: NT07
Distance(m): 7.42

ISO candela diagram on circular web



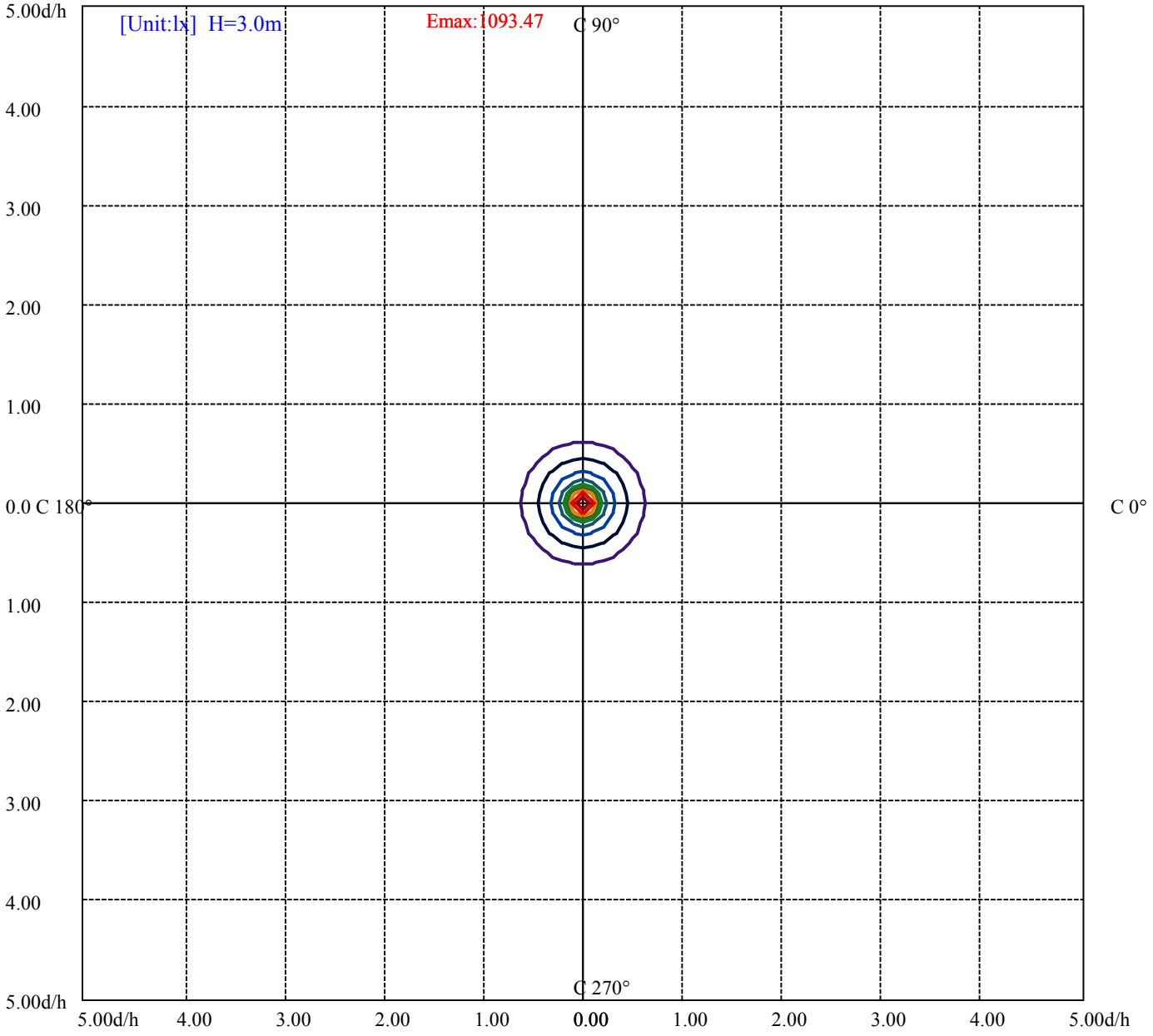
House [Unit:cd] Road

Imax:9841.19

(10%Imax) 984.119
(20%Imax) 1968.24
(30%Imax) 2952.36
(40%Imax) 3936.48
(50%Imax) 4920.6
(60%Imax) 5904.72
(70%Imax) 6888.84
(80%Imax) 7872.96
(90%Imax) 8857.08

Equipment: GMS1980 Date: 2017/9/20 Operator: NT07
Temperature(°C): 25.0 Humidity(%): 60.0% Distance(m): 7.42

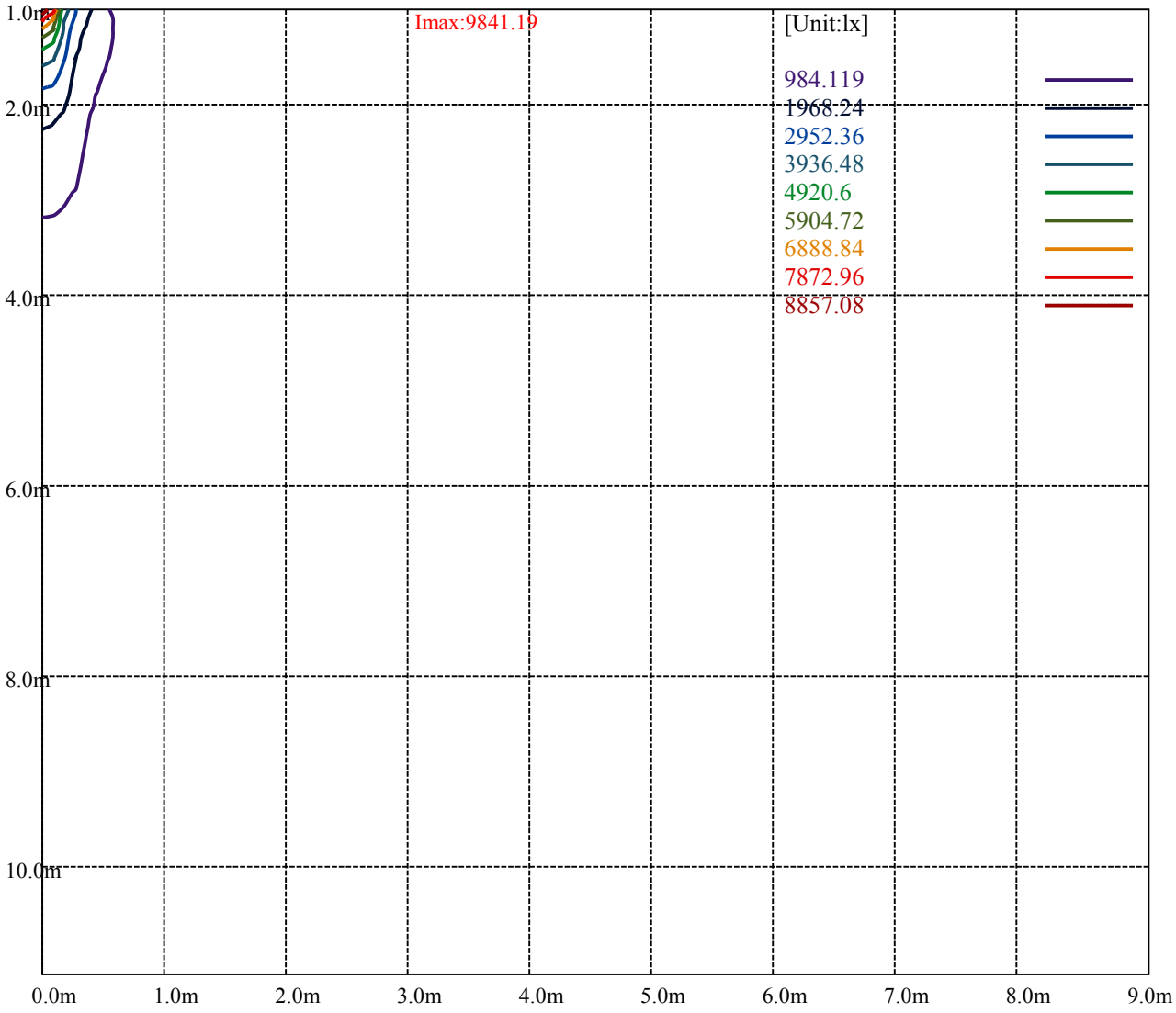
ISO illuminance diagram



(10%Emax) 109.3466
(20%Emax) 218.6933
(30%Emax) 328.04
(40%Emax) 437.3867
(50%Emax) 546.7322
(60%Emax) 656.0789
(70%Emax) 765.4255
(80%Emax) 874.7722
(90%Emax) 984.1189

Equipment: GMS1980
Temperature(°C): 25.0
Date: 2017/9/20
Humidity(%): 60.0%
Operator: NT07
Distance(m): 7.42

Space ISO Lux diagram



Equipment: GMS1980
Temperature(°C): 25.0

Date: 2017/9/20
Humidity(%): 60.0%

Operator: NT07
Distance(m): 7.42

Luminance Limitting Curve(no luminous side)

Luminance Table

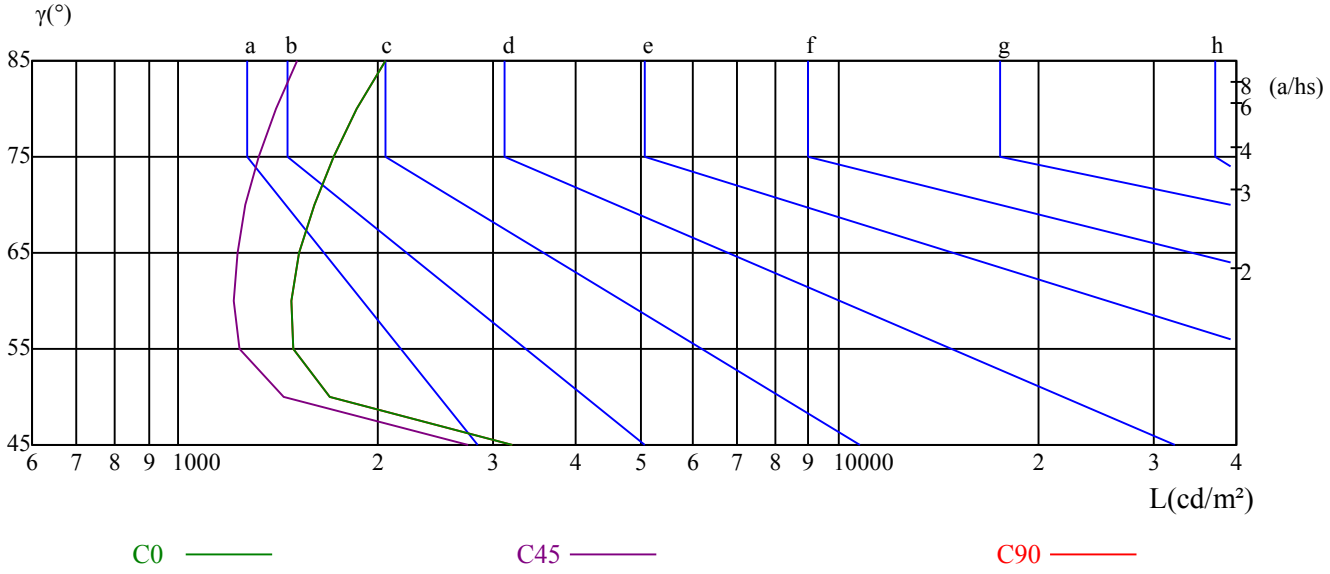
γ	45	50	55	60	65	70	75	80	85
C0	3201	1700	1488	1479	1523	1601	1712	1861	2063
C45	2752	1439	1241	1213	1227	1265	1324	1403	1511
C90	3201	1700	1488	1479	1523	1601	1712	1861	2063

L(Hor)(65)	L(Ver)(65)	L45(65)	L(Hor)(75)	L(Ver)(75)	L45(75)	L(Hor)(85)	L(Ver)(85)	L45(85)
3646	3646	3646	5866	5866	5866	17388	17388	17388

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

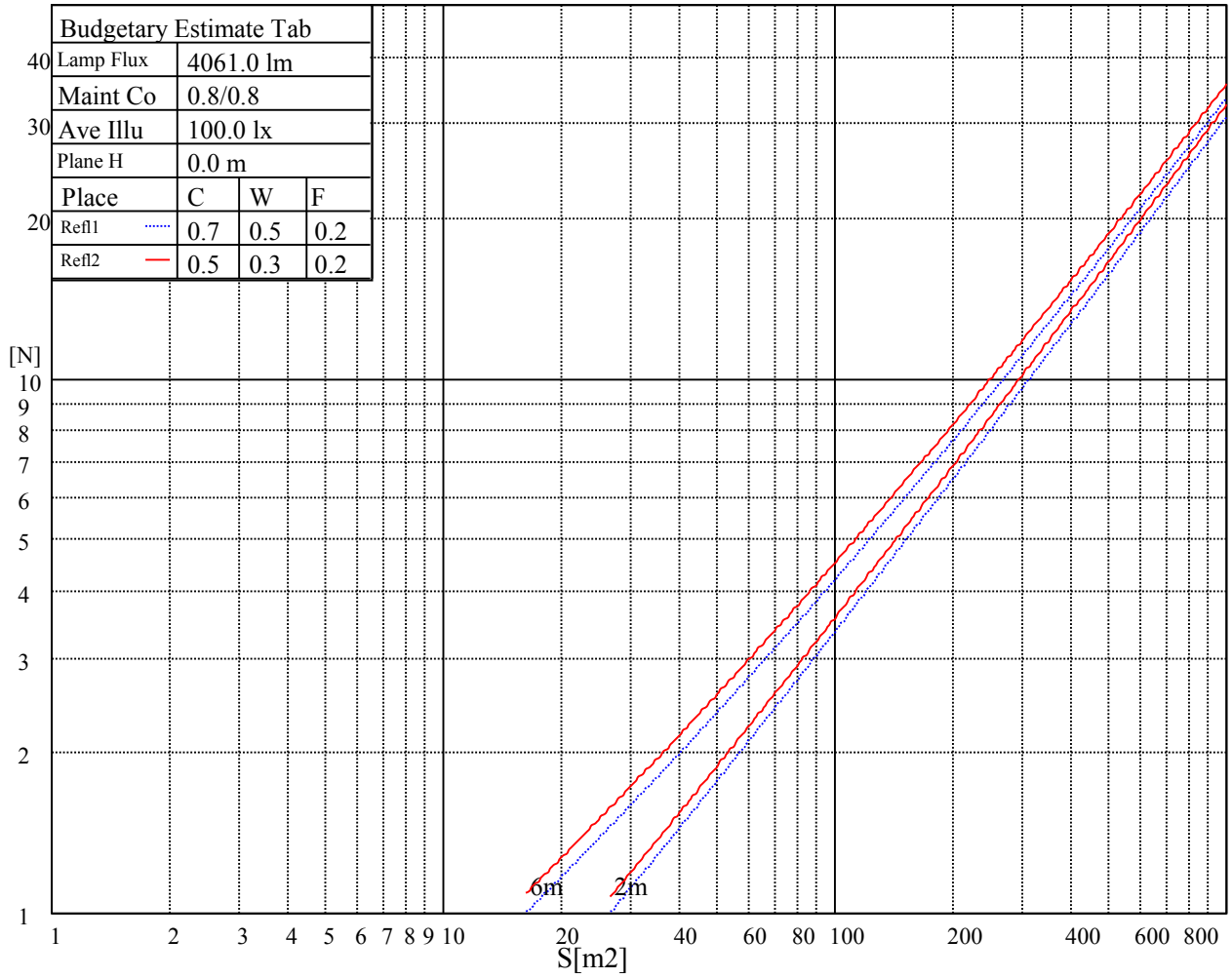
Illumination assessment according UGR

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	-2.20	-1.28	-1.83	-0.97	-0.65	-2.23	-1.31	-1.86	-1.00	-0.69
	3H	0.12	0.92	0.50	1.26	1.63	0.10	0.90	0.48	1.24	1.61
	4H	1.40	2.15	1.81	2.50	2.89	1.38	2.13	1.79	2.48	2.87
	6H	2.75	3.44	3.17	3.81	4.21	2.73	3.41	3.15	3.79	4.19
	8H	3.43	4.07	3.87	4.46	4.87	3.41	4.04	3.84	4.44	4.85
	12H	4.47	5.08	4.90	5.46	5.90	4.44	5.05	4.88	5.44	5.87
4H	2H	-1.70	-0.96	-1.29	-0.60	-0.21	-1.73	-0.98	-1.32	-0.63	-0.24
	3H	0.91	1.52	1.33	1.93	2.34	0.90	1.51	1.31	1.92	2.33
	4H	2.37	2.92	2.81	3.34	3.79	2.36	2.91	2.80	3.33	3.78
	6H	3.82	4.29	4.29	4.74	5.22	3.81	4.27	4.28	4.73	5.20
	8H	4.61	5.05	5.09	5.50	5.97	4.59	5.03	5.07	5.48	5.96
	12H	5.64	6.02	6.14	6.51	6.99	5.62	5.99	6.11	6.48	6.96
8H	4H	2.82	3.25	3.30	3.70	4.18	2.81	3.24	3.29	3.70	4.17
	6H	4.51	4.85	5.02	5.36	5.84	4.50	4.84	5.01	5.34	5.83
	8H	5.45	5.76	5.99	6.28	6.78	5.43	5.74	5.97	6.26	6.76
	12H	6.61	6.87	7.14	7.37	7.96	6.59	6.85	7.11	7.35	7.93
12H	4H	2.91	3.28	3.40	3.77	4.25	2.90	3.28	3.40	3.77	4.25
	6H	4.88	4.99	5.22	5.46	6.01	4.87	4.98	5.21	5.45	6.00
	8H	5.73	5.99	6.25	6.49	7.07	5.71	5.97	6.23	6.47	7.05

Variation with the observer position at spacings:

S = 1.0H	5.9/-10.1	5.9/-10.1
S = 1.5H	8.5/-8.1	8.5/-8.1
S = 2.0H	10.3/-6.9	10.3/-6.9
Standard tables:	BK1	BK1
Uncorrected UGR	-1.7	-1.7

Budgetary Estimate Table

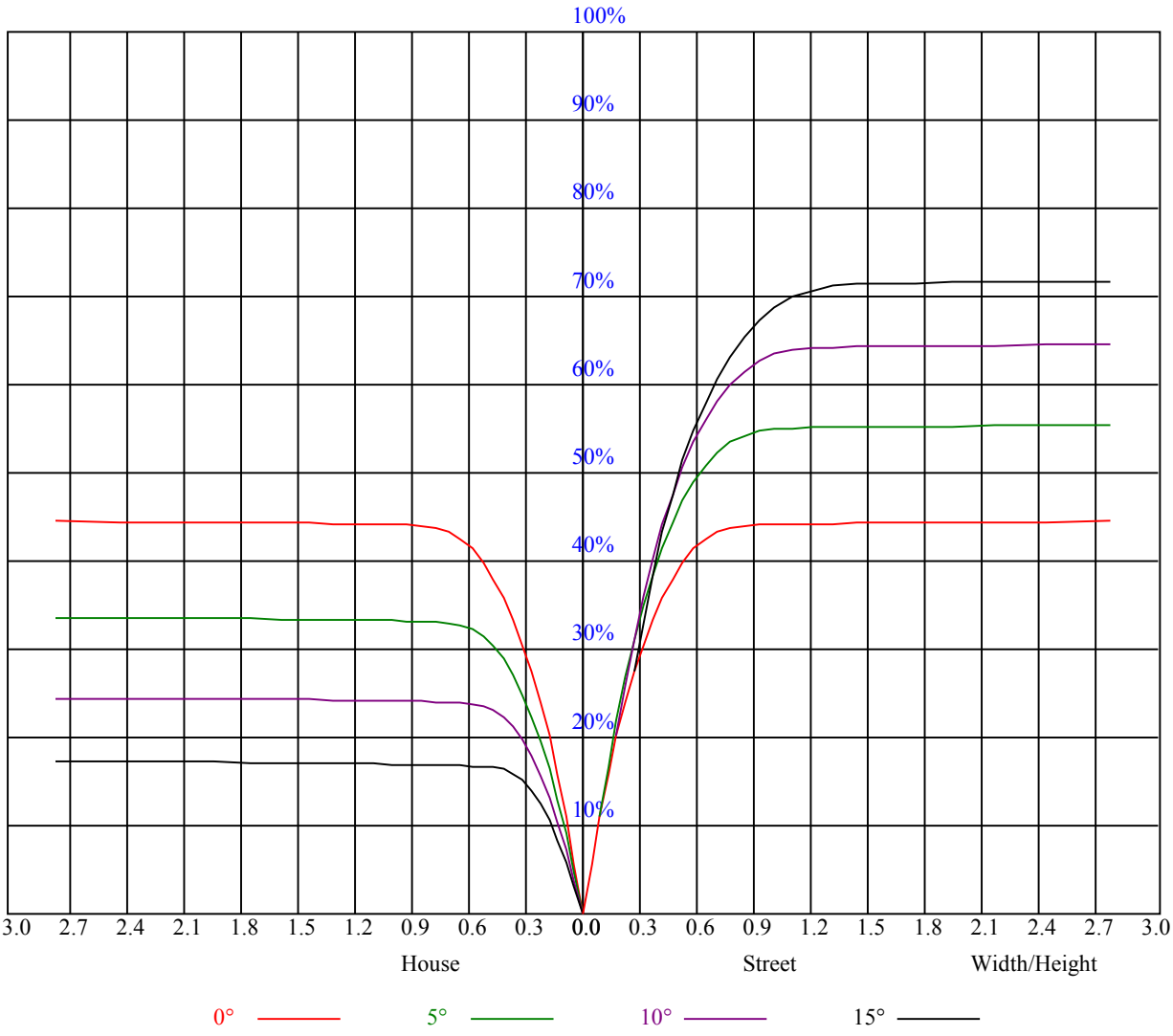


Equipment: GMS1980 Date: 2017/9/20 Operator: NT07
Temperature(°C): 25.0 Humidity(%): 60.0% Distance(m): 7.42

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	1.04	1.04	1.04	1.00	1.00	1.00	0.95	0.95	0.95	0.91	0.91	0.91	0.90
1	1.00	0.98	0.96	0.98	0.96	0.94	0.94	0.93	0.91	0.91	0.90	0.88	0.88	0.87	0.86	0.84
2	0.94	0.90	0.87	0.92	0.89	0.86	0.89	0.87	0.85	0.87	0.85	0.83	0.84	0.82	0.81	0.80
3	0.88	0.84	0.81	0.87	0.83	0.80	0.85	0.82	0.79	0.83	0.80	0.78	0.81	0.78	0.77	0.75
4	0.83	0.79	0.76	0.82	0.78	0.75	0.80	0.77	0.74	0.79	0.76	0.73	0.77	0.75	0.73	0.71
5	0.79	0.74	0.71	0.78	0.74	0.71	0.77	0.73	0.70	0.75	0.72	0.69	0.74	0.71	0.69	0.68
6	0.75	0.70	0.67	0.74	0.70	0.67	0.73	0.69	0.66	0.72	0.68	0.66	0.71	0.68	0.65	0.64
7	0.71	0.67	0.63	0.71	0.66	0.63	0.70	0.66	0.63	0.69	0.65	0.63	0.68	0.65	0.62	0.61
8	0.68	0.63	0.60	0.68	0.63	0.60	0.67	0.63	0.60	0.66	0.62	0.60	0.65	0.62	0.59	0.58
9	0.65	0.60	0.57	0.65	0.60	0.57	0.64	0.60	0.57	0.63	0.60	0.57	0.62	0.59	0.57	0.56
10	0.62	0.58	0.55	0.62	0.58	0.55	0.61	0.57	0.55	0.61	0.57	0.54	0.60	0.57	0.54	0.53

Coefficient Utilization Curve



Equipment: GMS1980
Temperature(°C): 25.0

Date: 2017/9/20
Humidity(%): 60.0%

Operator: NT07
Distance(m): 7.42

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	9838.03	9838.58	9715.80	9512.09	9236.26	8873.44	8294.25	7712.30	7040.06
45.0	9846.84	9809.40	9679.47	9459.79	9171.30	8793.61	8180.83	7538.87	6840.76
90.0	9830.87	9732.87	9563.85	9257.18	8909.23	8448.40	7792.13	6987.21	6248.90
135.0	9849.04	9780.22	9630.47	9371.15	9077.70	8634.50	8031.08	7373.15	6653.02
180.0	9838.03	9738.38	9575.41	9294.07	8926.84	8484.19	7846.64	7086.86	6361.77
225.0	9846.84	9780.22	9639.83	9409.14	9084.31	8697.81	8162.66	7463.45	6777.99
270.0	9830.87	9855.10	9781.87	9616.15	9389.32	9087.61	8644.41	8079.53	7453.54
315.0	9849.04	9816.01	9715.80	9512.64	9218.64	8867.38	8418.67	7715.60	7043.92
360.0	9838.03	9838.58	9715.80	9512.09	9236.26	8873.44	8294.25	7712.30	7040.06

C/γ(°)	9.0	10.0	11.0	12.0	13.0	14.0	15.0	16.0	17.0
0.0	6169.07	5509.49	4950.12	4487.10	4157.31	3954.15	3760.90	3599.04	3427.26
45.0	6041.34	5312.94	4796.51	4419.38	4111.06	3924.97	3776.87	3585.82	3429.46
90.0	5568.40	4895.62	4519.58	4253.66	3994.34	3821.46	3658.50	3496.63	3339.17
135.0	5794.14	5204.48	4751.37	4435.89	4145.75	3954.15	3782.37	3589.13	3447.63
180.0	5680.72	4984.26	4590.05	4303.76	4044.99	3872.67	3708.60	3543.98	3378.26
225.0	6081.53	5313.49	4833.40	4479.94	4180.98	3989.94	3816.51	3629.87	3462.50
270.0	6596.86	5927.92	5323.95	4843.31	4411.67	4173.83	3978.93	3776.87	3600.14
315.0	6339.19	5522.16	4984.26	4577.94	4257.51	4017.47	3843.49	3654.64	3504.34
360.0	6169.07	5509.49	4950.12	4487.10	4157.31	3954.15	3760.90	3599.04	3427.26

C/γ(°)	18.0	19.0	20.0	21.0	22.0	23.0	24.0	25.0	26.0
0.0	3281.36	3158.04	3020.94	2891.01	2789.71	2687.85	2571.13	2474.23	2374.03
45.0	3309.44	3147.02	3006.08	2906.98	2772.64	2674.09	2572.79	2443.40	2337.69
90.0	3198.23	3059.48	2940.56	2817.79	2707.67	2605.82	2486.35	2361.92	2250.71
135.0	3306.14	3157.48	3022.05	2906.98	2784.75	2685.65	2557.92	2431.84	2323.38
180.0	3242.82	3096.92	2976.35	2844.76	2731.35	2631.15	2528.74	2397.71	2289.25
225.0	3324.86	3175.10	3052.33	2916.89	2792.46	2686.75	2567.28	2453.31	2347.60
270.0	3457.54	3305.04	3151.98	3027.55	2900.37	2789.71	2673.54	2559.02	2450.56
315.0	3356.24	3206.48	3082.06	2951.57	2829.35	2728.04	2629.49	2504.52	2400.46
360.0	3281.36	3158.04	3020.94	2891.01	2789.71	2687.85	2571.13	2474.23	2374.03

C/γ(°)	27.0	28.0	29.0	30.0	31.0	32.0	33.0	34.0	35.0
0.0	2251.26	2136.19	2031.03	1920.37	1772.82	1619.76	1466.70	1277.31	1087.91
45.0	2231.99	2090.49	1992.49	1876.87	1688.03	1527.82	1356.59	1184.81	1003.13
90.0	2138.94	2008.46	1884.58	1729.87	1543.78	1360.99	1092.54	999.88	848.14
135.0	2206.11	2075.08	1966.61	1850.45	1630.22	1459.55	1308.14	1084.06	927.70
180.0	2184.64	2048.65	1942.39	1804.75	1616.46	1454.59	1289.97	1083.90	923.57
225.0	2236.94	2097.10	1996.90	1877.42	1712.80	1543.23	1387.97	1078.66	1019.15
270.0	2354.76	2201.15	2094.90	2008.46	1838.88	1685.28	1528.92	1348.33	1156.73
315.0	2285.39	2164.27	2040.39	1936.33	1772.82	1594.98	1433.12	1088.91	1069.20
360.0	2251.26	2136.19	2031.03	1920.37	1772.82	1619.76	1466.70	1277.31	1087.91

C/γ(°)	36.0	37.0	38.0	39.0	40.0	41.0	42.0	43.0	44.0
0.0	906.23	747.67	562.68	420.08	291.80	164.51	93.54	58.25	44.43
45.0	845.12	664.53	514.78	370.53	279.69	135.11	81.70	54.01	41.18
90.0	696.30	510.04	391.62	253.37	129.38	85.94	59.41	41.79	36.50
135.0	790.06	596.26	437.15	319.33	212.41	95.08	65.08	48.56	40.58
180.0	764.40	593.29	452.18	306.06	191.10	108.96	78.62	54.29	42.61
225.0	864.88	690.19	543.52	393.16	261.74	167.32	115.67	74.55	54.51
270.0	997.07	826.95	672.79	501.56	347.41	286.84	128.50	83.58	58.97
315.0	888.45	696.52	559.87	415.84	244.29	152.95	88.26	54.18	43.88
360.0	906.23	747.67	562.68	420.08	291.80	164.51	93.54	58.25	44.43

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	37.33	31.55	28.35	25.66	22.02	19.71	18.17	17.45	17.07
45.0	33.64	28.85	26.15	23.40	20.76	18.72	17.62	17.12	16.79
90.0	32.04	27.97	24.78	22.02	19.55	18.06	17.56	17.18	16.85
135.0	34.19	30.06	26.59	23.01	19.99	18.61	17.78	17.29	16.96
180.0	35.24	29.95	26.54	23.01	20.21	18.33	17.51	17.01	16.68
225.0	42.67	33.97	30.17	25.82	22.41	19.88	18.11	17.29	16.96
270.0	45.86	37.38	33.20	30.01	25.27	21.91	19.66	18.22	17.56
315.0	37.82	33.31	29.68	26.04	22.57	19.88	18.44	17.62	17.23
360.0	37.33	31.55	28.35	25.66	22.02	19.71	18.17	17.45	17.07

C/γ(°)	54.0	55.0	56.0	57.0	58.0	59.0	60.0	61.0	62.0
0.0	16.79	16.52	16.30	16.13	15.97	15.86	15.69	15.64	15.58
45.0	16.52	16.30	16.13	15.97	15.86	15.75	15.64	15.58	15.53
90.0	16.63	16.35	16.19	16.02	15.91	15.80	15.75	15.64	15.58
135.0	16.74	16.46	16.30	16.13	16.02	15.91	15.80	15.69	15.64
180.0	16.46	16.30	16.13	15.97	15.86	15.75	15.69	15.58	15.53
225.0	16.63	16.30	16.13	15.97	15.80	15.69	15.58	15.47	15.42
270.0	17.18	16.85	16.63	16.35	16.19	16.02	15.86	15.75	15.69
315.0	16.90	16.63	16.35	16.19	15.97	15.86	15.75	15.64	15.58
360.0	16.79	16.52	16.30	16.13	15.97	15.86	15.69	15.64	15.58

C/γ(°)	63.0	64.0	65.0	66.0	67.0	68.0	69.0	70.0	71.0
0.0	15.53	15.42	15.42	15.36	15.36	15.31	15.25	15.25	15.25
45.0	15.47	15.42	15.36	15.31	15.31	15.25	15.25	15.20	15.20
90.0	15.53	15.47	15.42	15.36	15.36	15.31	15.31	15.25	15.31
135.0	15.64	15.53	15.47	15.47	15.42	15.42	15.42	15.36	15.31
180.0	15.47	15.42	15.42	15.36	15.31	15.31	15.25	15.25	15.20
225.0	15.36	15.31	15.31	15.25	15.20	15.20	15.14	15.14	15.14
270.0	15.58	15.53	15.47	15.47	15.42	15.36	15.36	15.36	15.31
315.0	15.53	15.47	15.42	15.36	15.31	15.31	15.31	15.25	15.25
360.0	15.53	15.42	15.42	15.36	15.36	15.31	15.25	15.25	15.25

C/γ(°)	72.0	73.0	74.0	75.0	76.0	77.0	78.0	79.0	80.0
0.0	15.20	15.20	15.20	15.20	15.20	15.20	15.20	15.20	15.14
45.0	15.20	15.14	15.14	15.14	15.14	15.09	15.09	15.09	15.09
90.0	15.25	15.25	15.20	15.14	15.14	15.14	15.14	15.14	15.20
135.0	15.31	15.25	15.25	15.25	15.20	15.20	15.20	15.20	15.25
180.0	15.20	15.20	15.14	15.14	15.14	15.14	15.14	15.14	15.09
225.0	15.09	15.09	15.09	15.09	15.09	15.09	15.09	15.03	15.03
270.0	15.31	15.36	15.31	15.31	15.20	15.20	15.14	15.14	15.14
315.0	15.20	15.20	15.20	15.20	15.20	15.20	15.20	15.20	15.20
360.0	15.20	15.20	15.20	15.20	15.20	15.20	15.20	15.20	15.14

C/γ(°)	81.0	82.0	83.0	84.0	85.0	86.0	87.0	88.0	89.0
0.0	15.14	15.20	15.20	15.20	15.14	15.14	15.09	15.09	15.09
45.0	15.09	15.03	15.03	15.03	15.03	15.03	15.03	14.98	15.03
90.0	15.20	15.20	15.20	15.14	15.20	15.25	15.03	15.03	15.03
135.0	15.25	15.31	15.25	15.25	15.25	15.25	15.36	15.09	15.09
180.0	15.14	15.14	15.14	15.09	15.09	15.09	15.14	15.09	15.09
225.0	15.03	15.03	15.03	15.03	15.03	15.03	15.03	14.98	15.03
270.0	15.14	15.20	15.20	15.25	15.20	15.14	15.14	15.03	15.03
315.0	15.25	15.31	15.31	15.31	15.31	15.25	15.09	15.09	15.09
360.0	15.14	15.20	15.20	15.20	15.14	15.14	15.09	15.09	15.09

Intensity data(cd)

C/γ(°)	90.0
0.0	15.09
45.0	15.03
90.0	15.03
135.0	15.09
180.0	15.03
225.0	14.98
270.0	15.03
315.0	15.09
360.0	15.09