NATA LIGHTING CO.,LTD.
www.nata.cn
Email:info@nata.cn
Tel:+86-750-3770000 Fax:+86-750-3771111
Address:380 JinOu Road,GaoXin Zone,Jiang Men City,Guangdong,China

Nata

LumCAT: 5-1067-N
Luminaire:
Report No: nata-0100
Test No: GC2018071702
LampCAT: CREE XP-E2
Lamp flux(lm): 365.0
Number of Lamps: 1
Length(mm): 30
Phm Type: C

Voltage(V): 14.7000
Current(A): 0.2000
Power (W): 2.9400
PF: 0.0000
Ballast type: DC
Width(mm): 135
Height(mm): 0

Photometric Results

Lumens(lm): 247.83
Efficiency(%): 67.91%
Lumens(lm)/Power(W): 84.30
Central intensity(cd): 1073.985
Maximum intensity(cd): 1073.985
Angle of maximum intensity: C=0.0 γ=0.0
Beam Angle(50%Imax): [C0/180]Total=22.9
[C90/270]Total=22.9
Field angle(10%Imax): [C0/180]Total=48.0
[C90/270]Total=48.0
Maximum s/h(1/2): C0_180=0.39 C90_270=0.39
Maximum s/h(1/4): C0_180=0.40 C90_270=0.40
Up flux rate of lamp(%): 0.00%
Down flux rate of lamp(%): 67.91%
Up flux rate of LUM(%): - -
Down flux rate of LUM(%): 100.00%
CIE Type : Direct lighting
Output flux ratio in π solid angle : 98.233%

Zonal flux distribution table

γ(°)	Average I(cd)	Zonal F(lm)	Sum F(lm)	Eff Flux(%)	Eff Sum(%)
0.0	1073.985	0.000	0	.000%	.000%
1.0	1068.872	1.025	1.025	.281%	.414%
2.0	1049.946	3.041	4.066	.833%	1.641%
3.0	1019.782	4.950	9.017	1.356%	3.638%
4.0	982.241	6.701	15.718	1.836%	6.342%
5.0	933.495	8.241	23.959	2.258%	9.668%
6.0	882.107	9.541	33.501	2.614%	13.518%
7.0	821.531	10.574	44.075	2.898%	17.784%
8.0	760.336	11.321	55.396	3.102%	22.352%
9.0	694.426	11.790	67.186	3.231%	27.110%
10.0	627.354	11.962	79.148	3.278%	31.936%
11.0	564.658	11.911	91.059	3.264%	36.742%
12.0	503.856	11.680	102.739	3.201%	41.455%
13.0	443.349	11.241	113.98	3.080%	45.991%
14.0	388.987	10.654	124.634	2.919%	50.290%
15.0	341.983	10.035	134.669	2.750%	54.339%
16.0	297.064	9.364	144.033	2.566%	58.117%
17.0	261.587	8.700	152.732	2.384%	61.627%
18.0	228.780	8.085	160.818	2.215%	64.890%
19.0	202.016	7.495	168.313	2.054%	67.914%
20.0	176.834	6.934	175.247	1.900%	70.712%
21.0	155.555	6.383	181.629	1.749%	73.287%
22.0	138.529	5.910	187.539	1.619%	75.672%
23.0	122.156	5.470	193.009	1.499%	77.879%
24.0	107.677	5.025	198.034	1.377%	79.906%
25.0	94.332	4.593	202.627	1.259%	81.760%
26.0	82.929	4.184	206.811	1.147%	83.448%
27.0	71.821	3.786	210.597	1.037%	84.976%
28.0	62.510	3.401	213.998	.932%	86.348%
29.0	53.983	3.048	217.046	.835%	87.578%
30.0	46.530	2.714	219.76	.744%	88.673%
31.0	39.586	2.396	222.156	.657%	89.640%
32.0	33.736	2.101	224.257	.576%	90.487%
33.0	29.022	1.849	226.106	.507%	91.233%
34.0	25.058	1.637	227.742	.448%	91.894%
35.0	21.864	1.457	229.199	.399%	92.482%
36.0	19.160	1.306	230.506	.358%	93.009%
37.0	16.985	1.179	231.684	.323%	93.485%

Zonal flux distribution table

γ(°)	Average I(cd)	Zonal F(lm)	Sum F(lm)	Eff Flux(%)	Eff Sum(%)
38.0	15.044	1.069	232.754	.293%	93.916%
39.0	13.413	0.971	233.725	.266%	94.308%
40.0	12.050	0.888	234.613	.243%	94.666%
41.0	10.894	0.817	235.43	.224%	94.996%
42.0	9.807	0.752	236.182	.206%	95.299%
43.0	8.864	0.692	236.874	.190%	95.578%
44.0	8.086	0.640	237.513	.175%	95.837%
45.0	7.336	0.593	238.106	.162%	96.076%
46.0	6.710	0.549	238.656	.151%	96.297%
47.0	6.146	0.511	239.167	.140%	96.504%
48.0	5.636	0.476	239.643	.131%	96.696%
49.0	5.162	0.443	240.087	.122%	96.875%
50.0	4.735	0.413	240.499	.113%	97.041%
51.0	4.363	0.385	240.884	.105%	97.197%
52.0	4.054	0.361	241.245	.099%	97.342%
53.0	3.730	0.339	241.584	.093%	97.479%
54.0	3.482	0.318	241.902	.087%	97.607%
55.0	3.235	0.300	242.202	.082%	97.728%
56.0	2.994	0.281	242.483	.077%	97.842%
57.0	2.787	0.264	242.747	.072%	97.948%
58.0	2.601	0.249	242.996	.068%	98.049%
59.0	2.429	0.235	243.232	.064%	98.144%
60.0	2.237	0.220	243.452	.060%	98.233%
61.0	2.065	0.205	243.657	.056%	98.316%
62.0	1.927	0.192	243.85	.053%	98.393%
63.0	1.803	0.181	244.031	.050%	98.466%
64.0	1.679	0.171	244.202	.047%	98.535%
65.0	1.548	0.160	244.362	.044%	98.600%
66.0	1.452	0.150	244.511	.041%	98.660%
67.0	1.425	0.145	244.656	.040%	98.719%
68.0	1.390	0.143	244.799	.039%	98.776%
69.0	1.356	0.140	244.939	.038%	98.833%
70.0	1.335	0.138	245.077	.038%	98.888%
71.0	1.356	0.139	245.216	.038%	98.945%
72.0	1.363	0.141	245.357	.039%	99.002%
73.0	1.390	0.144	245.501	.039%	99.060%
74.0	1.404	0.147	245.648	.040%	99.119%
75.0	1.411	0.149	245.797	.041%	99.179%

Zonal flux distribution table

γ(°)	Average I(cd)	Zonal F(lm)	Sum F(lm)	Eff Flux(%)	Eff Sum(%)
76.0	1.349	0.146	245.943	.040%	99.238%
77.0	1.314	0.142	246.085	.039%	99.295%
78.0	1.197	0.134	246.22	.037%	99.350%
79.0	1.136	0.125	246.345	.034%	99.400%
80.0	1.108	0.121	246.466	.033%	99.449%
81.0	1.094	0.119	246.585	.033%	99.497%
82.0	1.074	0.118	246.703	.032%	99.544%
83.0	1.122	0.119	246.822	.033%	99.593%
84.0	1.239	0.129	246.951	.035%	99.645%
85.0	1.308	0.139	247.09	.038%	99.701%
86.0	1.390	0.147	247.237	.040%	99.760%
87.0	1.363	0.151	247.388	.041%	99.821%
88.0	1.335	0.148	247.536	.040%	99.880%
89.0	1.335	0.146	247.682	.040%	99.940%
90.0	1.397	0.150	247.832	.041%	100.000%

Zonal flux distribution table

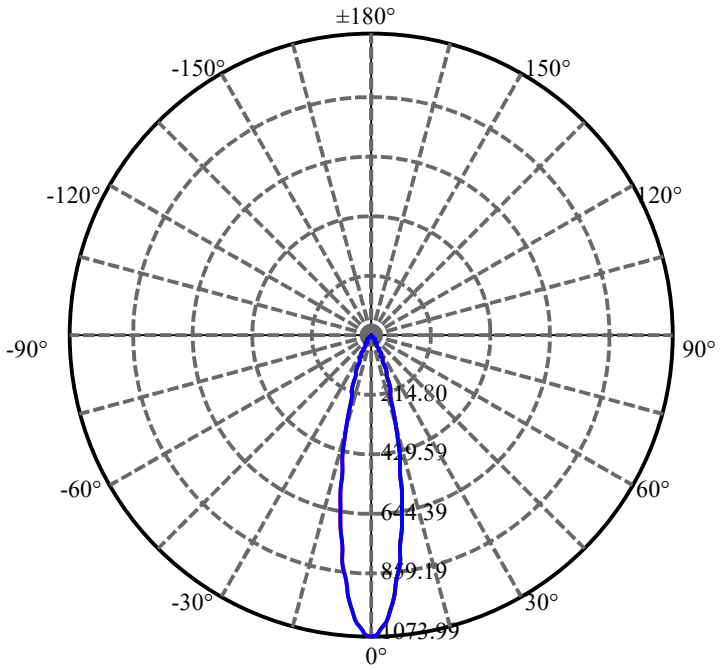
ZONAL LUMEN SUMMARY

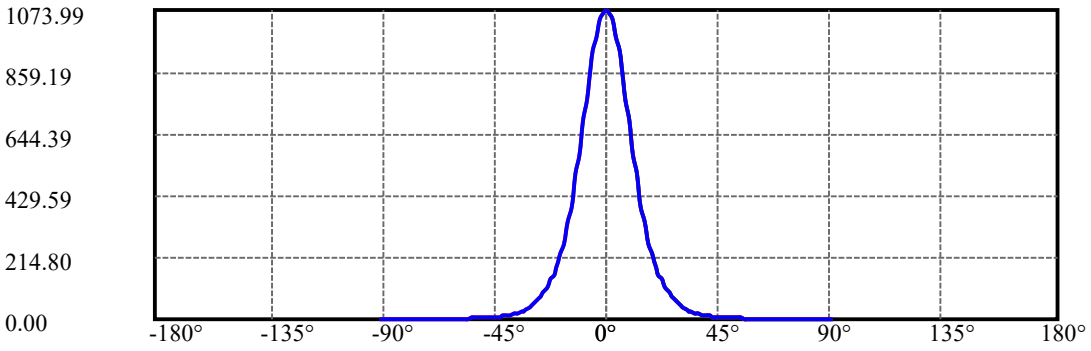
Zone	Lumens	%Lamp	%Fixt
0-30	219.76	60.22%	88.67%
0-40	234.61	64.29%	94.67%
0-60	243.45	66.71%	98.23%
0-90	247.68	67.87%	99.94%
0-120	247.68	67.87%	99.94%
0-180	247.83	67.91%	100.00%
60-90	4.45	1.22%	1.80%
90-120	0.00	0.00%	0.00%
90-130	0.00	0.00%	0.00%
90-150	0.00	0.00%	0.00%
90-180	0.00	0.00%	0.00%
0-24.05	198.27	54.33%	80.00%

ZONAL LUMEN SUMMARY

0-10	79.15
10-20	96.10
20-30	44.51
30-40	14.85
40-50	5.89
50-60	2.95
60-70	1.62
70-80	1.39
80-90	1.22
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:24.0 Right:24.0
:C90/270Left:24.0 Right:24.0

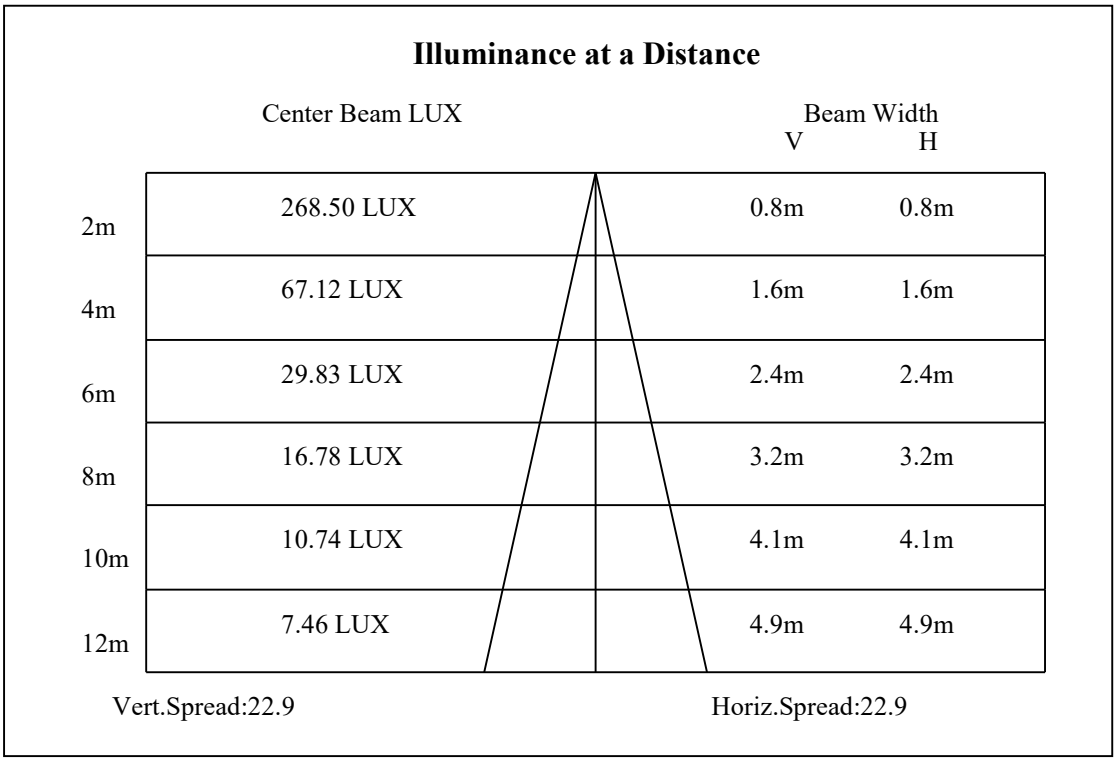
Beam Angle(50%Imax):C0/180Left:11.5 Right:11.5
:C90/270Left:11.5 Right:11.5

Equipment: GMS1980
Temperature(°C): 25.0

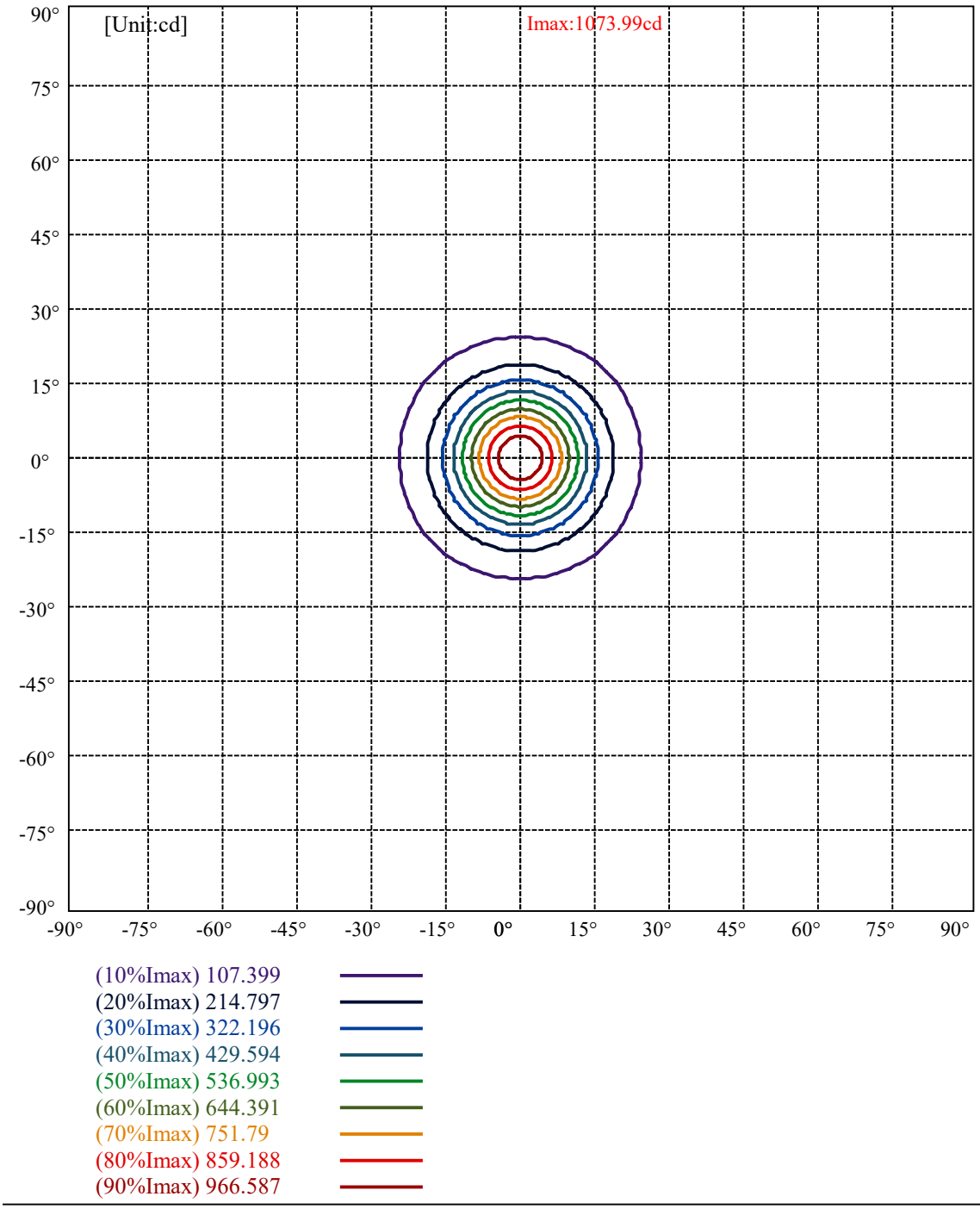
Date: 2018/7/17
Humidity(%): 60.0%

Operator: NT07
Distance(m): 7.42

Lux distance Curve



ISO-Intensity(V-H)



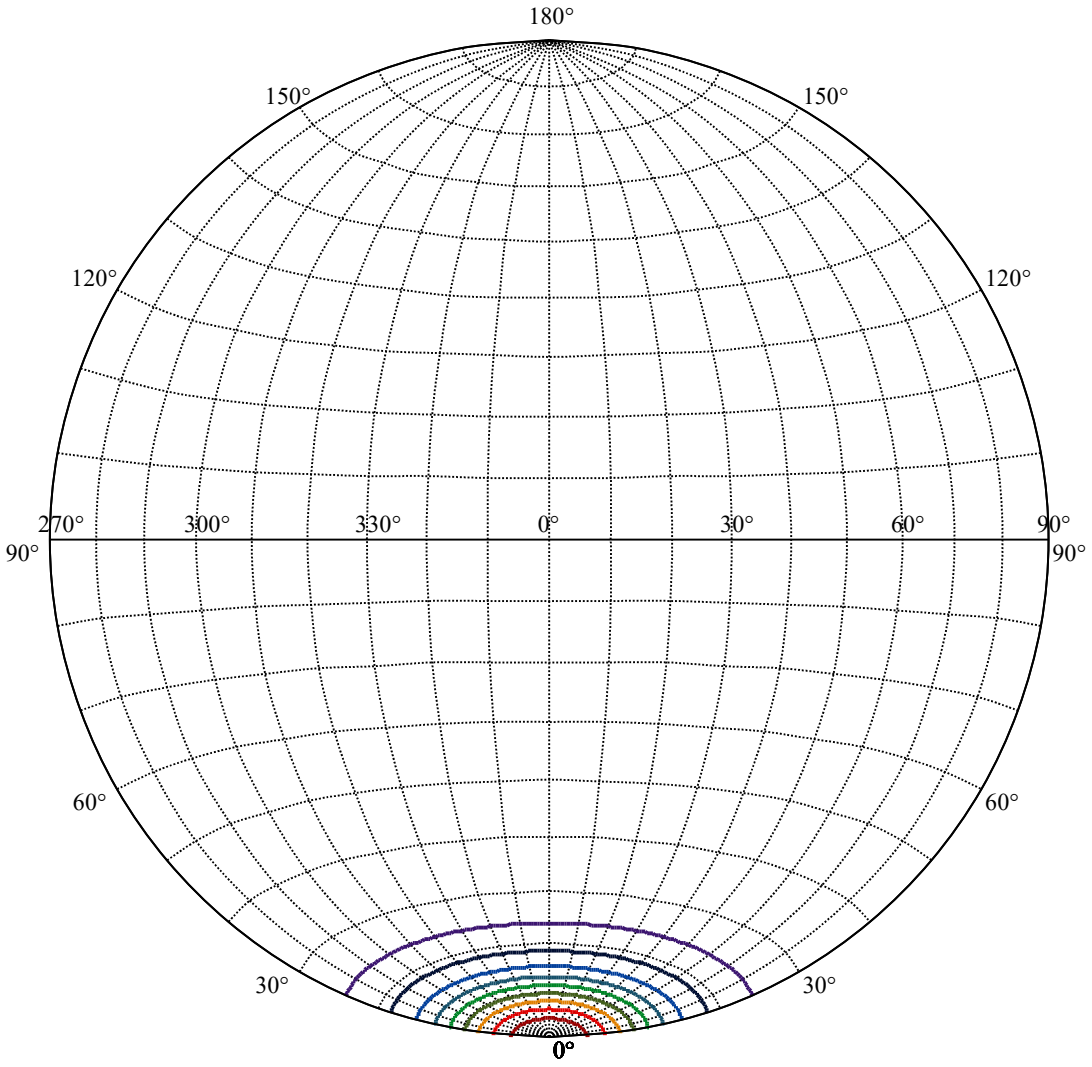
(10%Imax) 107.399
(20%Imax) 214.797
(30%Imax) 322.196
(40%Imax) 429.594
(50%Imax) 536.993
(60%Imax) 644.391
(70%Imax) 751.79
(80%Imax) 859.188
(90%Imax) 966.587

Equipment: GMS1980
Temperature(°C): 25.0

Date: 2018/7/17
Humidity(%): 60.0%

Operator: NT07
Distance(m): 7.42

ISO candela diagram on circular web



House [Unit:cd] Road

Imax:1073.99

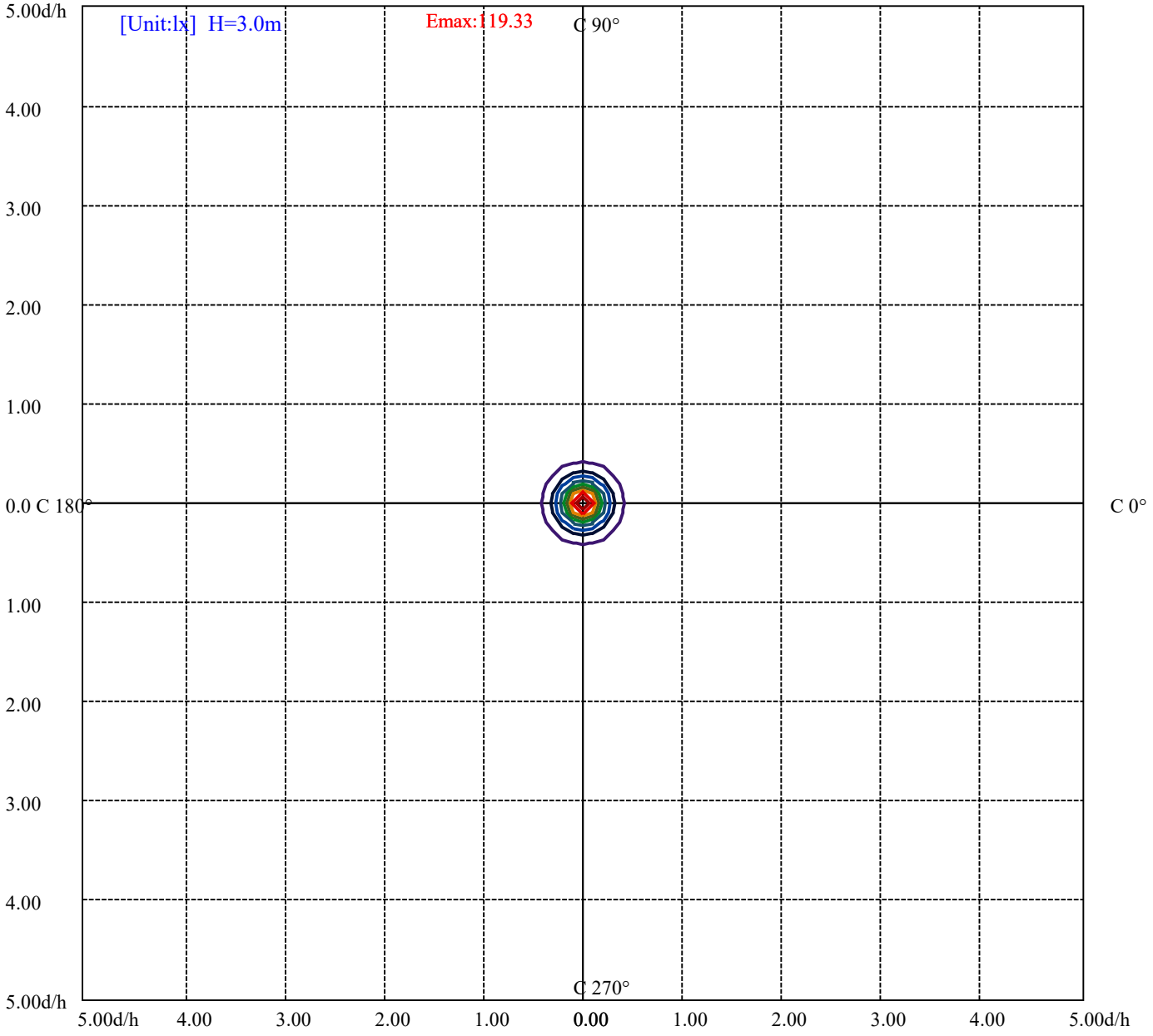
(10%Imax) 107.399
(20%Imax) 214.797
(30%Imax) 322.196
(40%Imax) 429.594
(50%Imax) 536.993
(60%Imax) 644.391
(70%Imax) 751.79
(80%Imax) 859.188
(90%Imax) 966.587

Equipment: GMS1980
Temperature(°C): 25.0

Date: 2018/7/17
Humidity(%): 60.0%

Operator: NT07
Distance(m): 7.42

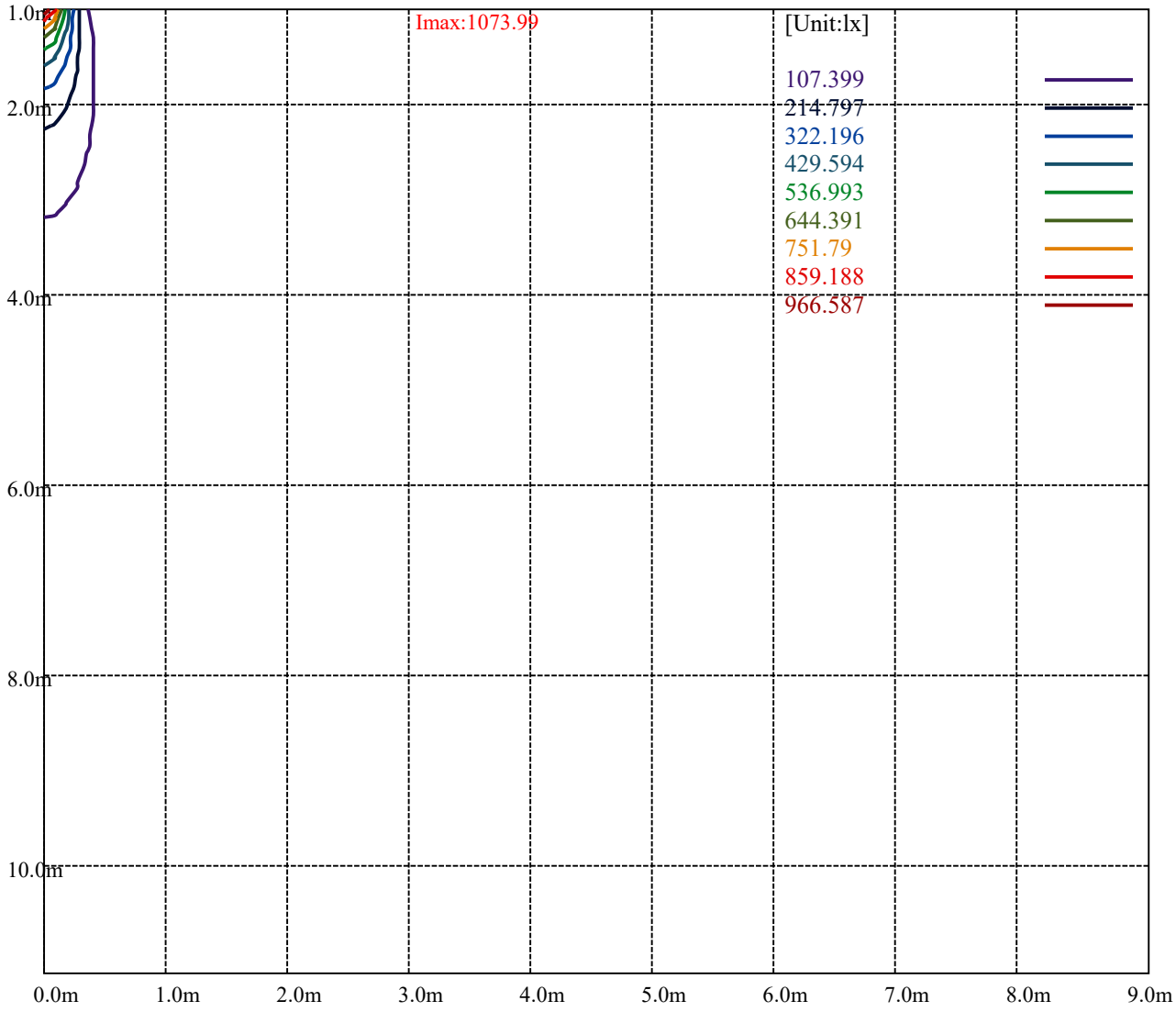
ISO illuminance diagram



(10%Emax) 11.93311
(20%Emax) 23.86633
(30%Emax) 35.79945
(40%Emax) 47.73267
(50%Emax) 59.66578
(60%Emax) 71.599
(70%Emax) 83.53211
(80%Emax) 95.46533
(90%Emax) 107.3984

Equipment: GMS1980
Temperature(°C): 25.0
Date: 2018/7/17
Humidity(%): 60.0%
Operator: NT07
Distance(m): 7.42

Space ISO Lux diagram



Equipment: GMS1980
Temperature(°C): 25.0

Date: 2018/7/17
Humidity(%): 60.0%

Operator: NT07
Distance(m): 7.42

Luminance Limitting Curve(no luminous side)

Luminance Table

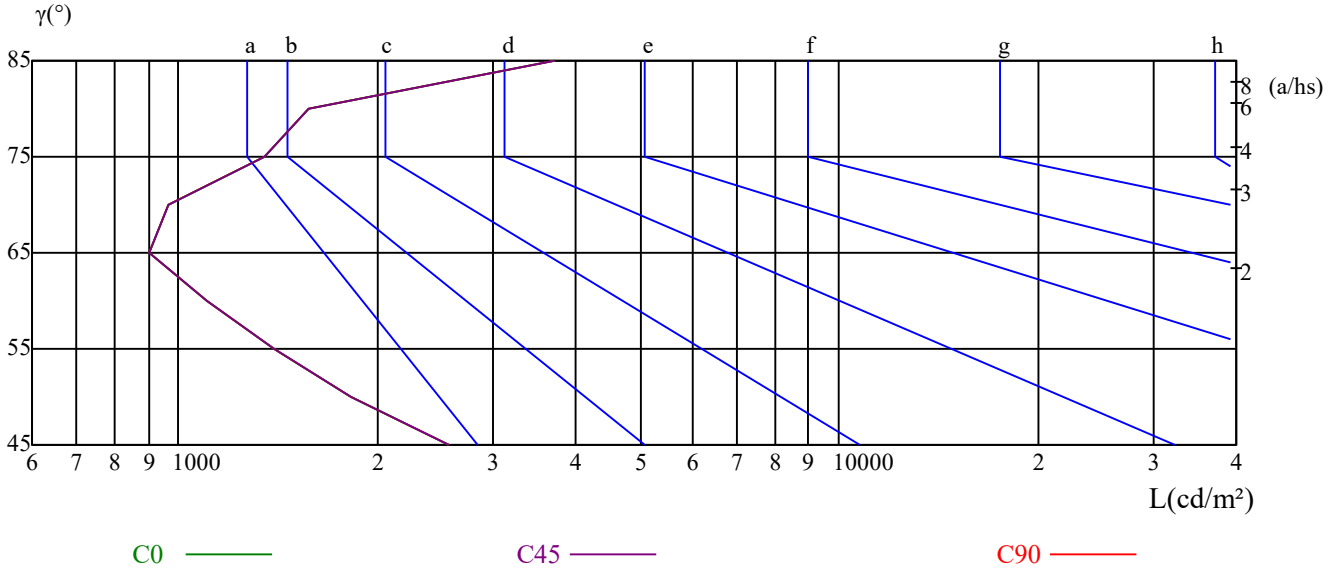
γ	45	50	55	60	65	70	75	80	85
C0	2562	1819	1392	1105	905	964	1346	1576	3704
C45	2562	1819	1392	1105	905	964	1346	1576	3704
C90	2562	1819	1392	1105	905	964	1346	1576	3704

L(Hor)(65)	L(Ver)(65)	L45(65)	L(Hor)(75)	L(Ver)(75)	L45(75)	L(Hor)(85)	L(Ver)(85)	L45(85)
905	905	905	1346	1346	1346	3704	3704	3704

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

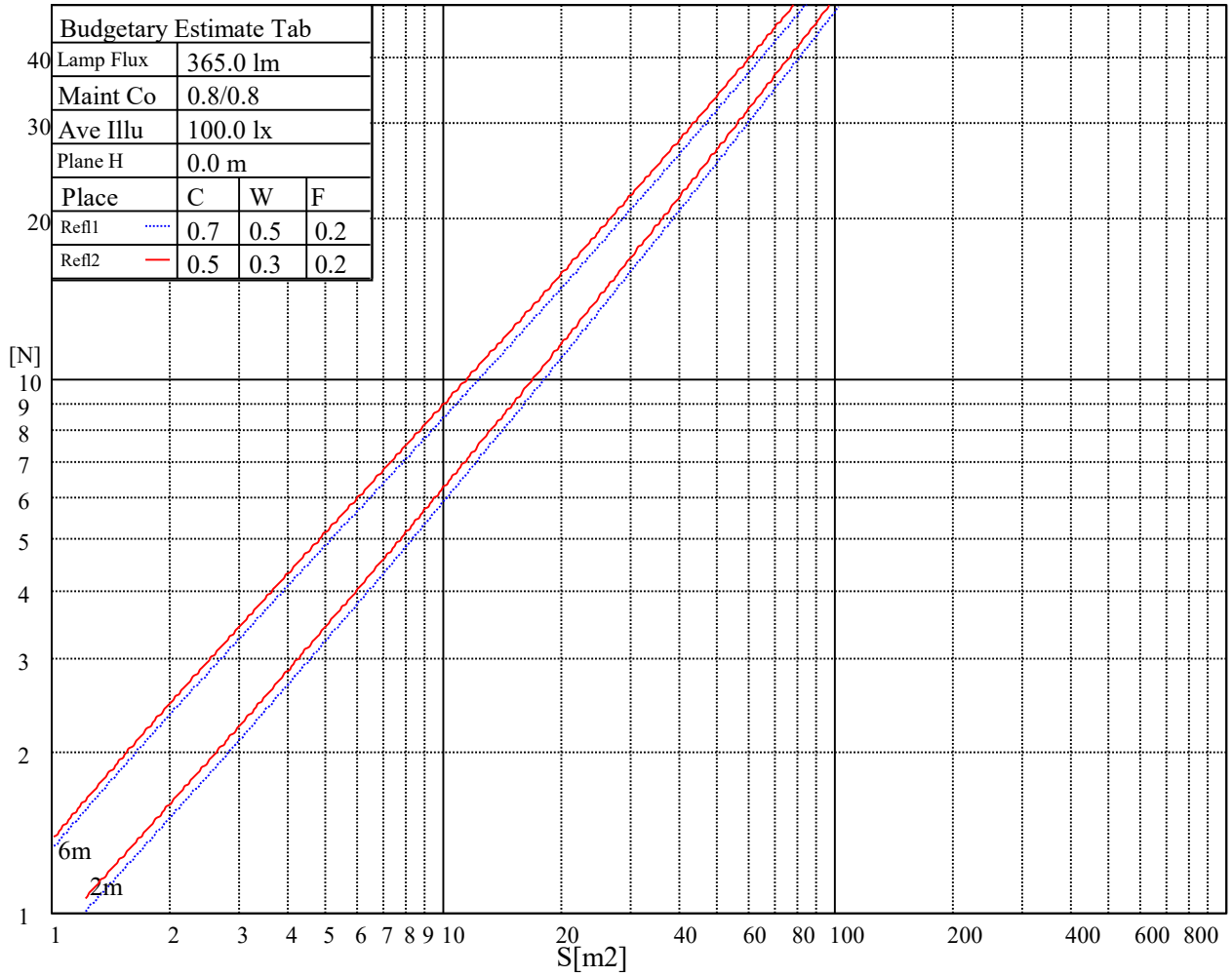
Illumination assessment according UGR

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	9.58	10.53	9.94	10.84	11.16	8.68	9.63	9.04	9.94	10.26
	3H	10.90	11.74	11.29	12.08	12.45	9.74	10.58	10.12	10.91	11.28
	4H	12.20	12.98	12.61	13.34	13.73	10.63	11.41	11.04	11.76	12.15
	6H	13.25	13.96	13.67	14.34	14.74	11.83	12.54	12.25	12.92	13.32
	8H	13.89	14.55	14.32	14.95	15.36	12.61	13.27	13.04	13.67	14.08
	12H	15.32	15.96	15.75	16.34	16.77	14.03	14.67	14.46	15.05	15.48
4H	2H	9.84	10.61	10.24	10.97	11.36	9.09	9.86	9.49	10.22	10.61
	3H	11.51	12.15	11.92	12.56	12.96	10.52	11.16	10.93	11.57	11.97
	4H	13.07	13.64	13.51	14.07	14.52	11.69	12.26	12.13	12.68	13.13
	6H	14.46	14.95	14.93	15.40	15.88	13.20	13.68	13.67	14.13	14.61
	8H	15.22	15.68	15.70	16.13	16.60	14.09	14.55	14.57	15.00	15.47
	12H	16.67	17.06	17.16	17.55	18.03	15.49	15.88	15.98	16.37	16.85
8H	4H	13.43	13.89	13.91	14.34	14.82	12.30	12.75	12.77	13.20	13.68
	6H	15.06	15.42	15.57	15.92	16.41	14.07	14.43	14.58	14.93	15.42
	8H	16.08	16.40	16.61	16.92	17.42	15.20	15.52	15.74	16.05	16.54
	12H	17.83	18.11	18.35	18.61	19.19	16.85	17.13	17.37	17.62	18.21
12H	4H	13.51	13.90	14.00	14.39	14.87	12.43	12.82	12.92	13.31	13.79
	6H	15.50	15.58	15.79	16.05	16.60	14.60	14.68	14.89	15.15	15.70
	8H	16.44	16.72	16.97	17.22	17.80	15.67	15.94	16.19	16.44	17.02

Variation with the observer position at spacings:

S = 1.0H	2.5/-1.9	2.5/-1.9
S = 1.5H	3.6/-1.8	3.6/-1.8
S = 2.0H	4.5/-1.7	4.5/-1.7
Standard tables:	BKBF	BKBF
Uncorrected UGR	-4.1	-4.1

Budgetary Estimate Table

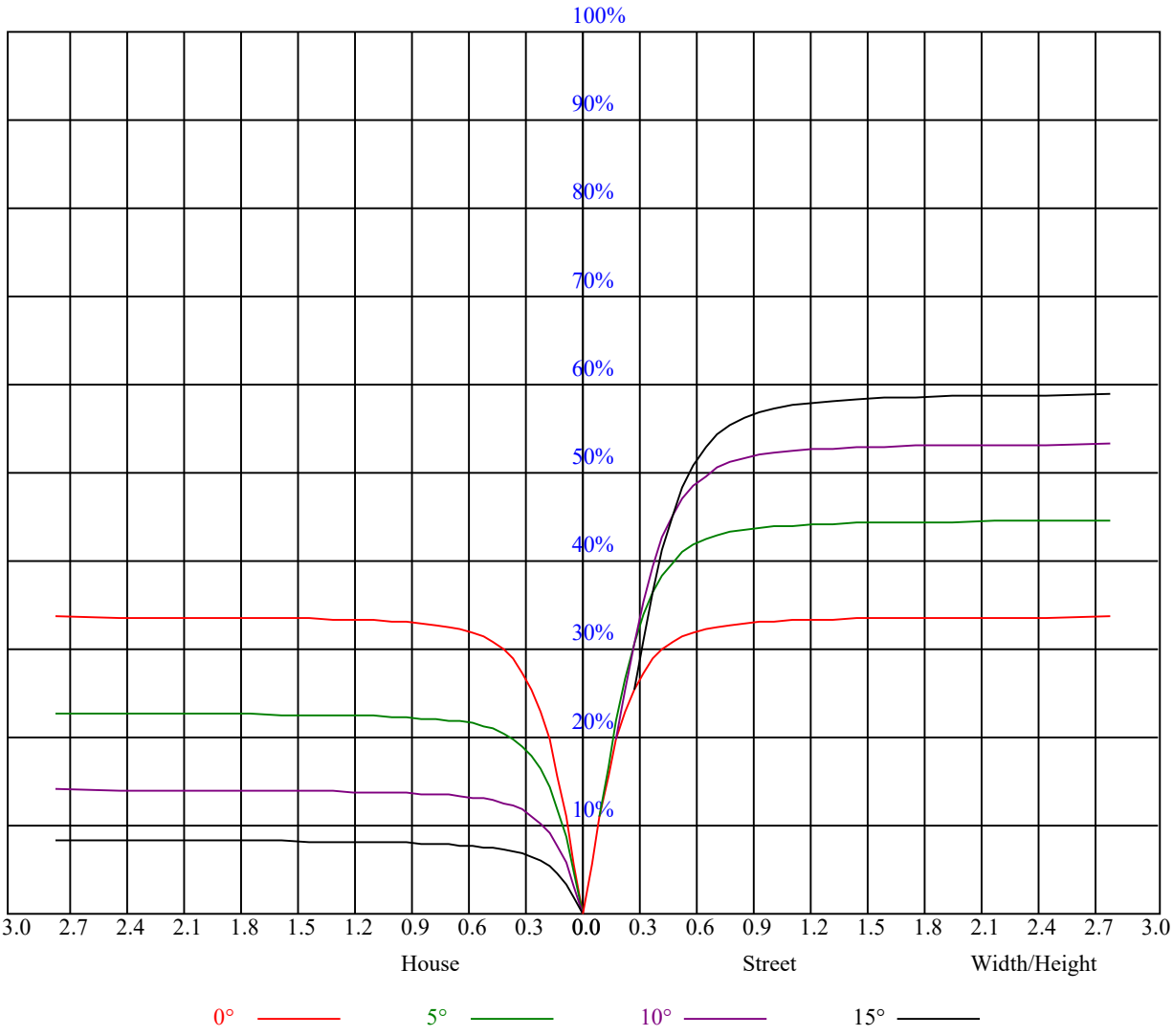


Equipment: GMS1980 Date: 2018/7/17 Operator: NT07
Temperature(°C): 25.0 Humidity(%): 60.0% Distance(m): 7.42

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	0.81	0.81	0.81	0.79	0.79	0.79	0.75	0.75	0.75	0.72	0.72	0.72	0.69	0.69	0.69	0.68
1	0.76	0.75	0.73	0.75	0.73	0.72	0.72	0.71	0.70	0.69	0.69	0.68	0.67	0.66	0.66	0.65
2	0.72	0.70	0.68	0.71	0.69	0.67	0.69	0.67	0.66	0.67	0.65	0.64	0.65	0.64	0.63	0.62
3	0.68	0.66	0.64	0.68	0.65	0.63	0.66	0.64	0.62	0.64	0.63	0.61	0.63	0.61	0.60	0.59
4	0.65	0.62	0.60	0.65	0.62	0.60	0.63	0.61	0.59	0.62	0.60	0.58	0.61	0.59	0.58	0.57
5	0.63	0.60	0.57	0.62	0.59	0.57	0.61	0.58	0.57	0.60	0.58	0.56	0.59	0.57	0.56	0.55
6	0.60	0.57	0.55	0.60	0.57	0.55	0.59	0.56	0.54	0.58	0.56	0.54	0.57	0.55	0.54	0.53
7	0.58	0.55	0.53	0.58	0.55	0.53	0.57	0.54	0.52	0.56	0.54	0.52	0.55	0.53	0.52	0.51
8	0.56	0.53	0.51	0.56	0.53	0.51	0.55	0.52	0.50	0.54	0.52	0.50	0.54	0.52	0.50	0.49
9	0.54	0.51	0.49	0.54	0.51	0.49	0.53	0.51	0.49	0.53	0.50	0.49	0.52	0.50	0.49	0.48
10	0.52	0.49	0.47	0.52	0.49	0.47	0.52	0.49	0.47	0.51	0.49	0.47	0.51	0.49	0.47	0.46

Coefficient Utilization Curve



Equipment: GMS1980
Temperature(°C): 25.0

Date: 2018/7/17
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	1072.22	1062.26	1035.83	1004.61	966.18	909.42	859.98	807.90	744.42
45.0	1076.30	1059.67	1024.21	988.48	945.37	884.37	830.97	774.59	710.39
90.0	1073.16	1056.86	1028.67	979.29	940.25	889.38	827.99	761.98	703.68
135.0	1074.26	1070.35	1055.93	1026.47	990.24	942.68	887.01	831.52	773.65
180.0	1072.22	1072.00	1057.91	1029.83	995.14	948.07	898.58	834.54	765.39
225.0	1076.30	1083.18	1078.22	1058.18	1028.67	991.24	940.31	881.67	822.05
270.0	1073.16	1082.68	1075.64	1061.16	1024.54	981.11	940.97	877.16	819.07
315.0	1074.26	1063.96	1043.15	1010.23	967.51	921.70	871.05	802.89	744.03
360.0	1072.22	1062.26	1035.83	1004.61	966.18	909.42	859.98	807.90	744.42

C/γ(°)	9.0	10.0	11.0	12.0	13.0	14.0	15.0	16.0	17.0
0.0	681.32	624.56	560.58	505.31	445.35	389.69	343.99	297.41	257.39
45.0	646.53	590.87	529.09	475.63	420.36	369.37	329.13	286.40	251.61
90.0	635.30	570.27	515.33	456.69	409.01	358.64	314.32	279.47	248.36
135.0	697.07	635.85	574.35	508.67	446.78	397.12	346.64	300.99	268.34
180.0	701.25	629.13	558.71	498.70	441.99	378.73	333.48	293.01	253.26
225.0	751.24	679.34	613.55	541.42	481.08	419.58	363.92	319.71	281.45
270.0	758.90	680.22	617.51	554.86	479.87	424.87	374.71	318.45	280.62
315.0	683.80	608.59	548.14	489.56	422.34	373.89	329.68	281.06	251.66
360.0	681.32	624.56	560.58	505.31	445.35	389.69	343.99	297.41	257.39

C/γ(°)	18.0	19.0	20.0	21.0	22.0	23.0	24.0	25.0	26.0
0.0	226.67	199.30	169.46	149.15	131.42	112.32	98.94	86.93	76.20
45.0	223.47	200.79	171.28	152.51	137.92	118.87	103.01	92.44	77.96
90.0	217.91	191.60	171.50	149.70	134.28	120.52	107.80	93.05	82.25
135.0	234.10	208.22	183.94	162.31	145.24	129.93	112.04	99.82	88.04
180.0	218.74	192.26	166.55	145.29	129.22	113.53	101.25	88.75	77.63
225.0	241.81	214.72	190.83	165.61	148.21	132.25	116.00	101.58	89.91
270.0	247.92	216.92	190.16	169.74	150.14	132.74	118.81	104.77	93.32
315.0	219.62	192.31	170.95	150.14	131.81	117.10	103.56	87.32	78.13
360.0	226.67	199.30	169.46	149.15	131.42	112.32	98.94	86.93	76.20

C/γ(°)	27.0	28.0	29.0	30.0	31.0	32.0	33.0	34.0	35.0
0.0	64.31	56.16	49.28	42.01	35.35	30.34	25.60	21.75	18.94
45.0	66.95	59.46	49.94	43.44	37.93	32.15	27.97	24.83	21.36
90.0	72.34	61.99	53.02	45.15	37.44	31.16	26.76	22.85	19.99
135.0	75.04	65.96	57.64	49.44	42.45	37.27	31.66	27.58	24.50
180.0	68.49	60.18	50.60	43.16	36.50	29.73	25.44	21.97	18.44
225.0	77.79	67.06	58.64	50.54	44.16	38.04	32.92	29.01	25.66
270.0	81.26	70.58	62.16	54.12	44.65	38.10	32.59	27.03	23.40
315.0	68.38	58.69	50.60	44.38	38.21	33.09	29.23	25.44	22.63
360.0	64.31	56.16	49.28	42.01	35.35	30.34	25.60	21.75	18.94

C/γ(°)	36.0	37.0	38.0	39.0	40.0	41.0	42.0	43.0	44.0
0.0	16.30	14.37	12.50	10.96	9.86	8.86	7.82	7.10	6.50
45.0	19.21	17.23	15.25	13.87	12.66	11.40	10.24	9.41	8.53
90.0	17.34	15.20	13.60	12.06	10.74	9.74	8.92	7.98	7.38
135.0	21.64	19.43	17.23	15.42	13.98	12.72	11.29	10.30	9.41
180.0	16.24	14.37	12.50	11.18	10.08	8.97	8.15	7.38	6.66
225.0	22.19	19.93	17.95	15.91	14.26	12.94	11.67	10.46	9.52
270.0	20.43	17.62	15.36	13.65	12.06	10.90	9.74	8.81	8.04
315.0	19.93	17.73	15.97	14.26	12.77	11.62	10.63	9.47	8.64
360.0	16.30	14.37	12.50	10.96	9.86	8.86	7.82	7.10	6.50

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	5.78	5.34	4.96	4.57	4.18	3.85	3.58	3.30	3.08
45.0	7.76	7.16	6.50	6.00	5.45	4.96	4.57	4.29	3.91
90.0	6.83	6.22	5.84	5.40	5.01	4.68	4.40	4.07	3.80
135.0	8.42	7.71	7.05	6.44	5.78	5.34	4.84	4.51	4.13
180.0	6.11	5.67	5.12	4.73	4.40	4.02	3.74	3.47	3.14
225.0	8.59	7.82	7.10	6.39	5.89	5.34	4.84	4.46	4.13
270.0	7.32	6.66	6.17	5.67	5.18	4.84	4.46	4.18	3.85
315.0	7.87	7.10	6.44	5.89	5.40	4.84	4.46	4.13	3.80
360.0	5.78	5.34	4.96	4.57	4.18	3.85	3.58	3.30	3.08

C/γ(°)	54.0	55.0	56.0	57.0	58.0	59.0	60.0	61.0	62.0
0.0	2.92	2.75	2.53	2.37	2.20	2.09	1.82	1.71	1.54
45.0	3.63	3.41	3.14	2.92	2.75	2.59	2.42	2.26	2.15
90.0	3.58	3.30	3.14	2.92	2.70	2.53	2.37	2.15	1.98
135.0	3.85	3.58	3.30	3.08	2.86	2.64	2.42	2.26	2.09
180.0	2.97	2.75	2.53	2.31	2.20	1.98	1.82	1.65	1.49
225.0	3.80	3.52	3.25	3.03	2.81	2.64	2.42	2.26	2.15
270.0	3.63	3.36	3.08	2.92	2.75	2.59	2.42	2.20	2.09
315.0	3.47	3.19	2.97	2.75	2.53	2.37	2.20	2.04	1.93
360.0	2.92	2.75	2.53	2.37	2.20	2.09	1.82	1.71	1.54

C/γ(°)	63.0	64.0	65.0	66.0	67.0	68.0	69.0	70.0	71.0
0.0	1.38	1.27	1.21	1.05	1.10	1.10	1.10	1.05	1.10
45.0	2.04	1.93	1.82	1.71	1.60	1.54	1.49	1.43	1.43
90.0	1.87	1.71	1.49	1.43	1.43	1.43	1.49	1.43	1.49
135.0	1.98	1.82	1.71	1.60	1.49	1.43	1.32	1.27	1.27
180.0	1.38	1.27	1.16	1.10	1.10	1.10	1.10	1.10	1.10
225.0	2.04	1.93	1.82	1.71	1.65	1.60	1.49	1.49	1.54
270.0	1.93	1.82	1.65	1.54	1.60	1.60	1.60	1.65	1.65
315.0	1.82	1.71	1.54	1.49	1.43	1.32	1.27	1.27	1.27
360.0	1.38	1.27	1.21	1.05	1.10	1.10	1.10	1.05	1.10

C/γ(°)	72.0	73.0	74.0	75.0	76.0	77.0	78.0	79.0	80.0
0.0	1.10	1.10	1.10	1.10	1.10	1.05	1.05	1.05	1.05
45.0	1.43	1.49	1.49	1.43	1.43	1.38	1.16	1.10	1.10
90.0	1.54	1.60	1.65	1.65	1.21	1.10	1.05	1.05	1.10
135.0	1.27	1.27	1.27	1.21	1.21	1.21	1.21	1.16	1.16
180.0	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10
225.0	1.54	1.60	1.60	1.65	1.60	1.54	1.49	1.38	1.16
270.0	1.65	1.71	1.76	1.87	1.93	1.93	1.32	1.10	1.10
315.0	1.27	1.27	1.27	1.27	1.21	1.21	1.21	1.16	1.10
360.0	1.10	1.10	1.10	1.10	1.10	1.05	1.05	1.05	1.05

C/γ(°)	81.0	82.0	83.0	84.0	85.0	86.0	87.0	88.0	89.0
0.0	1.05	1.05	1.05	1.10	1.05	1.05	1.05	1.10	1.05
45.0	1.10	1.05	1.38	1.98	2.09	2.15	1.98	1.82	1.82
90.0	1.05	1.05	1.16	1.38	1.43	1.38	1.38	1.38	1.38
135.0	1.16	1.10	1.10	1.10	1.16	1.21	1.21	1.21	1.21
180.0	1.10	1.10	1.10	1.10	1.10	1.10	1.05	1.05	1.10
225.0	1.10	1.10	1.10	1.05	1.16	1.71	1.65	1.54	1.54
270.0	1.10	1.05	1.05	1.10	1.32	1.38	1.38	1.38	1.38
315.0	1.10	1.10	1.05	1.10	1.16	1.16	1.21	1.21	1.21
360.0	1.05	1.05	1.05	1.10	1.05	1.05	1.05	1.10	1.05

Intensity data(cd)

C/γ(°)	90.0
0.0	1.10
45.0	1.98
90.0	1.43
135.0	1.21
180.0	1.05
225.0	1.71
270.0	1.38
315.0	1.32
360.0	1.10