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

NATA

LumCAT: 1421-E
Luminaire: 92.70.046.00
Report No: NATA0100
Test No: GC2019010214
LampCAT: CREE CXA1512
Lamp flux(lm): 1552.0
Number of Lamps: 1
Length(mm): 41
Phm Type: C

Voltage(V): 35.5000
Current(A): 0.3000
Power (W): 10.6500
PF: 0.0000
Ballast type: DC
Width(mm): 41
Height(mm): 0

Photometric Results

Lumens(lm): 1309.51
Efficiency(%): 84.38%
Lumens(lm)/Power(W): 123.04
Central intensity(cd): 3857.484
Maximum intensity(cd): 3857.484
Angle of maximum intensity: C=0.0 γ=0.0
Beam Angle(50%Imax): [C0/180]Total=31.6
[C90/270]Total=31.6
Field angle(10%Imax): [C0/180]Total=56.8
[C90/270]Total=56.8
Maximum s/h(1/2): C0_180=0.52 C90_270=0.52
Maximum s/h(1/4): C0_180=0.55 C90_270=0.55
Up flux rate of lamp(%): 0.00%
Down flux rate of lamp(%): 84.43%
Up flux rate of LUM(%): - -
Down flux rate of LUM(%): 100.00%
CIE Type : Direct lighting
Output flux ratio in π solid angle : 98.193%

Equipment: GMS1980
Temperature(°C): 10.0
Date: 2019/1/2
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	3857.484	0.923	0.923	.059%	.070%
1.0	3848.344	7.365	8.288	.475%	.633%
2.0	3818.109	14.612	22.9	.942%	1.749%
3.0	3765.234	21.609	44.51	1.392%	3.399%
4.0	3698.508	28.292	72.802	1.823%	5.559%
5.0	3613.852	34.540	107.341	2.225%	8.197%
6.0	3504.586	40.172	147.513	2.588%	11.265%
7.0	3366.281	44.988	192.501	2.899%	14.700%
8.0	3236.344	49.393	241.894	3.183%	18.472%
9.0	3068.930	52.647	294.541	3.392%	22.492%
10.0	2894.695	55.122	349.663	3.552%	26.702%
11.0	2736.141	57.252	406.914	3.689%	31.074%
12.0	2566.266	58.510	465.425	3.770%	35.542%
13.0	2386.336	58.867	524.292	3.793%	40.037%
14.0	2223.000	58.975	583.266	3.800%	44.541%
15.0	2055.516	58.340	641.607	3.759%	48.996%
16.0	1894.430	57.262	698.869	3.690%	53.369%
17.0	1752.117	56.176	755.045	3.620%	57.658%
18.0	1601.367	54.266	809.31	3.496%	61.802%
19.0	1465.594	52.325	861.635	3.371%	65.798%
20.0	1337.063	50.148	911.783	3.231%	69.628%
21.0	1208.630	47.498	959.281	3.060%	73.255%
22.0	1087.151	44.660	1003.941	2.878%	76.665%
23.0	988.003	42.334	1046.275	2.728%	79.898%
24.0	870.279	38.817	1085.092	2.501%	82.862%
25.0	745.643	34.557	1119.649	2.227%	85.501%
26.0	638.993	30.718	1150.366	1.979%	87.847%
27.0	529.066	26.340	1176.706	1.697%	89.858%
28.0	422.529	21.753	1198.459	1.402%	91.519%
29.0	333.345	17.722	1216.181	1.142%	92.873%
30.0	264.966	14.528	1230.709	.936%	93.982%
31.0	178.123	10.060	1240.77	.648%	94.750%
32.0	116.810	6.788	1247.558	.437%	95.269%
33.0	80.747	4.823	1252.38	.311%	95.637%
34.0	58.570	3.592	1255.972	.231%	95.911%
35.0	46.076	2.898	1258.87	.187%	96.133%
36.0	36.563	2.357	1261.227	.152%	96.313%
37.0	29.264	1.931	1263.158	.124%	96.460%

Zonal flux distribution table

γ(°)	Average I(cd)	Zonal F(lm)	Sum F(lm)	Eff Flux(%)	Eff Sum(%)
38.0	23.998	1.620	1264.778	.104%	96.584%
39.0	20.890	1.442	1266.22	.093%	96.694%
40.0	18.584	1.310	1267.53	.084%	96.794%
41.0	16.791	1.208	1268.738	.078%	96.886%
42.0	15.441	1.133	1269.871	.073%	96.973%
43.0	14.435	1.080	1270.95	.070%	97.055%
44.0	13.774	1.049	1272	.068%	97.135%
45.0	13.226	1.026	1273.025	.066%	97.214%
46.0	12.748	1.006	1274.031	.065%	97.290%
47.0	12.298	0.986	1275.017	.064%	97.366%
48.0	11.939	0.973	1275.99	.063%	97.440%
49.0	11.566	0.957	1276.947	.062%	97.513%
50.0	11.215	0.942	1277.889	.061%	97.585%
51.0	10.927	0.931	1278.821	.060%	97.656%
52.0	10.624	0.918	1279.739	.059%	97.726%
53.0	10.371	0.908	1280.647	.059%	97.796%
54.0	10.097	0.896	1281.543	.058%	97.864%
55.0	9.844	0.884	1282.427	.057%	97.932%
56.0	9.619	0.874	1283.301	.056%	97.998%
57.0	9.415	0.866	1284.167	.056%	98.065%
58.0	9.197	0.855	1285.023	.055%	98.130%
59.0	9.000	0.846	1285.869	.055%	98.194%
60.0	8.852	0.841	1286.709	.054%	98.259%
61.0	8.648	0.829	1287.539	.053%	98.322%
62.0	8.494	0.822	1288.361	.053%	98.385%
63.0	8.360	0.817	1289.178	.053%	98.447%
64.0	8.205	0.809	1289.987	.052%	98.509%
65.0	8.065	0.802	1290.788	.052%	98.570%
66.0	7.959	0.797	1291.586	.051%	98.631%
67.0	7.840	0.791	1292.377	.051%	98.691%
68.0	7.741	0.787	1293.164	.051%	98.752%
69.0	7.671	0.785	1293.949	.051%	98.812%
70.0	7.622	0.785	1294.735	.051%	98.872%
71.0	7.566	0.784	1295.519	.051%	98.931%
72.0	7.538	0.786	1296.305	.051%	98.991%
73.0	7.439	0.780	1297.086	.050%	99.051%
74.0	7.355	0.775	1297.861	.050%	99.110%
75.0	7.277	0.771	1298.632	.050%	99.169%

Zonal flux distribution table

γ(°)	Average I(cd)	Zonal F(lm)	Sum F(lm)	Eff Flux(%)	Eff Sum(%)
76.0	7.221	0.768	1299.4	.050%	99.228%
77.0	7.144	0.763	1300.163	.049%	99.286%
78.0	7.109	0.762	1300.926	.049%	99.344%
79.0	7.179	0.773	1301.699	.050%	99.403%
80.0	7.376	0.797	1302.495	.051%	99.464%
81.0	7.516	0.814	1303.309	.052%	99.526%
82.0	7.362	0.799	1304.109	.052%	99.587%
83.0	7.059	0.768	1304.877	.050%	99.646%
84.0	7.010	0.765	1305.642	.049%	99.704%
85.0	6.996	0.764	1306.406	.049%	99.763%
86.0	6.926	0.758	1307.164	.049%	99.821%
87.0	6.673	0.731	1307.894	.047%	99.876%
88.0	5.948	0.652	1308.546	.042%	99.926%
89.0	5.899	0.647	1309.193	.042%	99.976%
90.0	5.829	0.320	1309.513	.021%	100.000%

Zonal flux distribution table

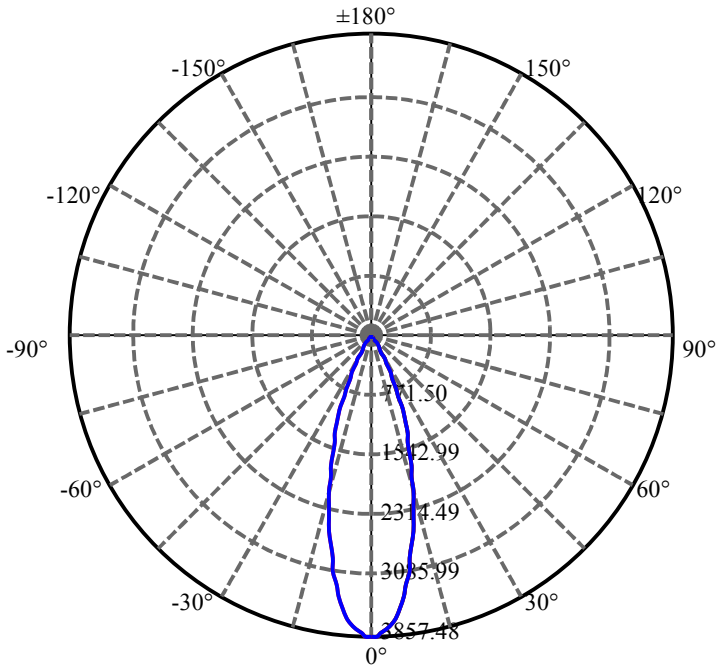
ZONAL LUMEN SUMMARY

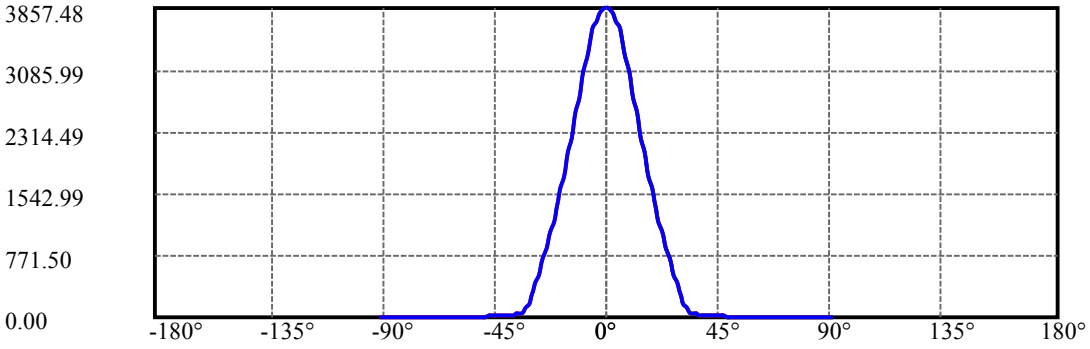
Zone	Lumens	%Lamp	%Fixt
0-30	1230.71	79.30%	93.98%
0-40	1267.53	81.67%	96.79%
0-60	1286.71	82.91%	98.26%
0-90	1309.19	84.36%	99.98%
0-120	1309.19	84.36%	99.98%
0-180	1309.51	84.38%	100.00%
60-90	23.32	1.50%	1.78%
90-120	0.00	0.00%	0.00%
90-130	0.00	0.00%	0.00%
90-150	0.00	0.00%	0.00%
90-180	0.00	0.00%	0.00%
0-23.03	1047.61	67.50%	80.00%

ZONAL LUMEN SUMMARY

0-10	349.66
10-20	562.12
20-30	318.93
30-40	36.82
40-50	10.36
50-60	8.82
60-70	8.03
70-80	7.76
80-90	6.70
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):

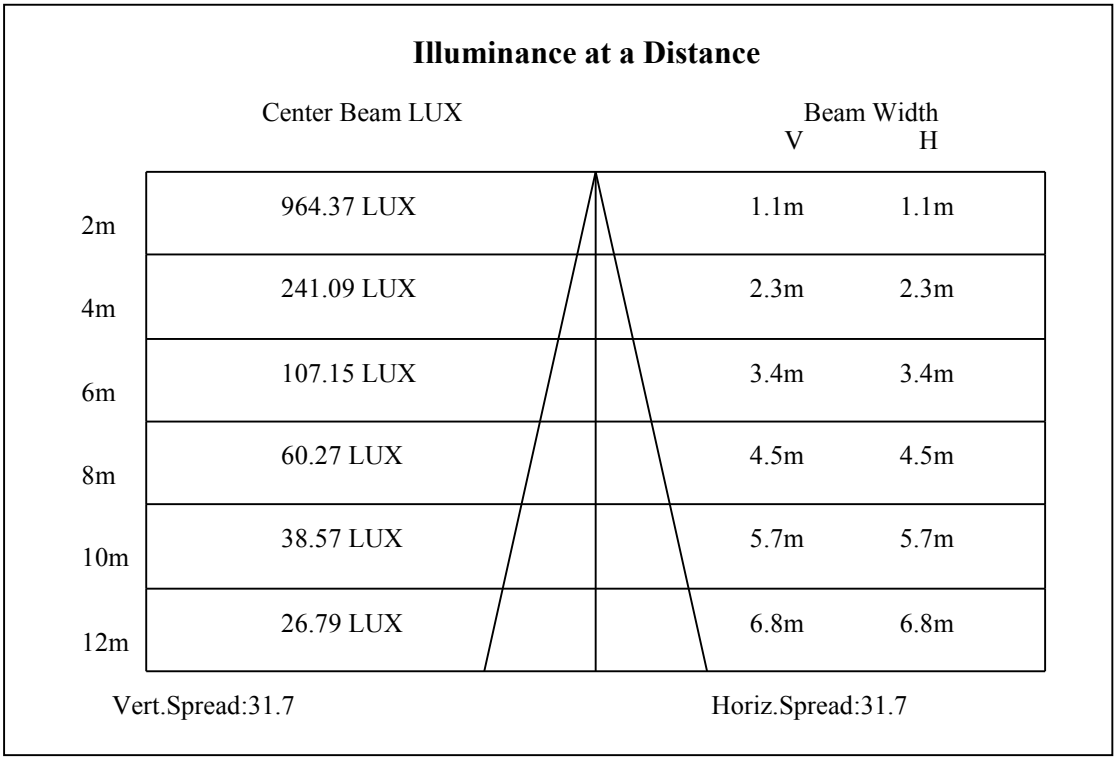
C0/C180:

C90/C270:

Field angle(10%Imax):C0/180Left:28.4 Right:28.4
:C90/270Left:28.4 Right:28.4

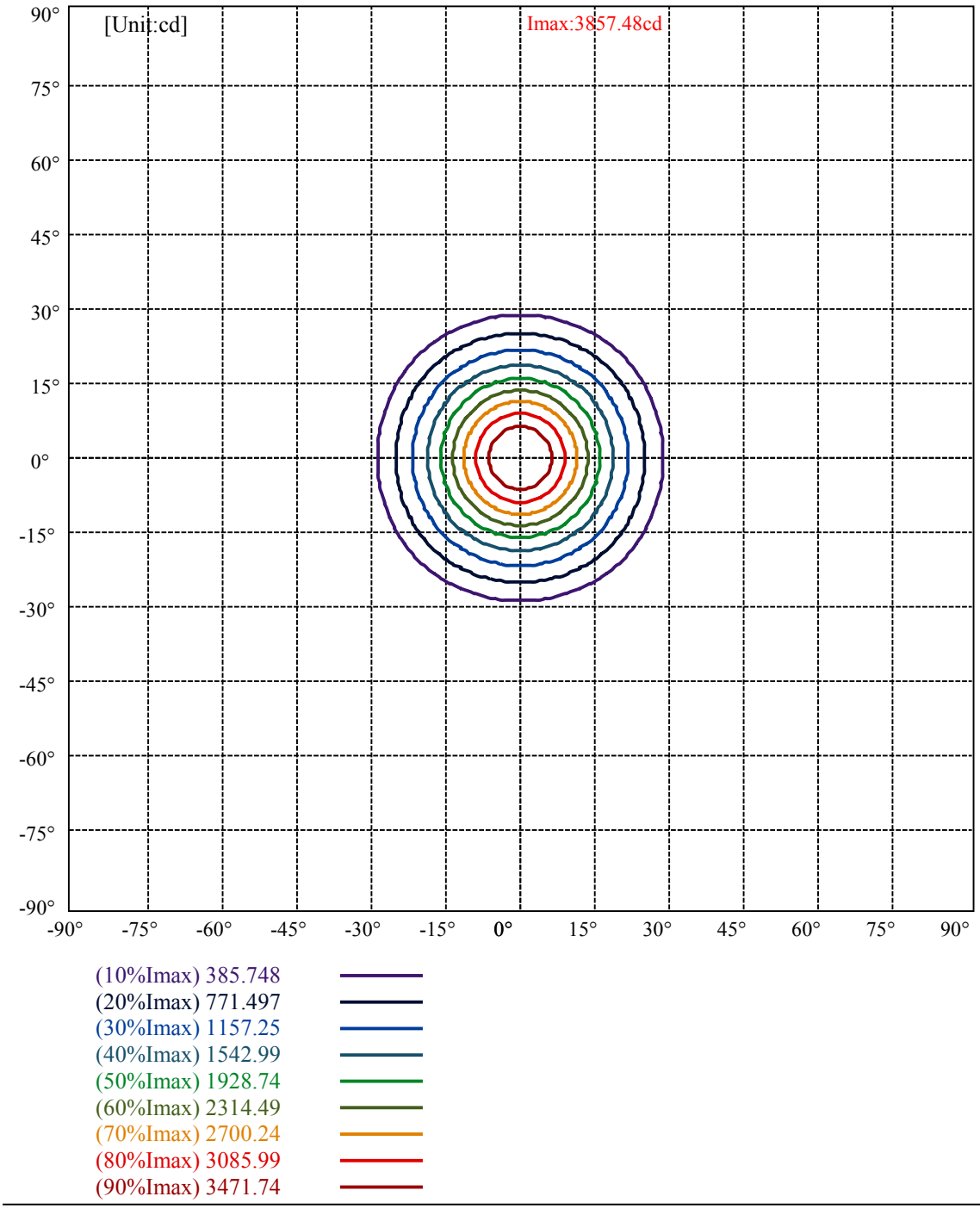
Beam Angle(50%Imax):C0/180Left:15.8 Right:15.8
:C90/270Left:15.8 Right:15.8

Lux distance Curve



Equipment: GMS1980 Date: 2019/1/2 Operator: NT07
Temperature(°C): 10.0 Humidity(%): 65.0% Distance(m): 7.50

ISO-Intensity(V-H)

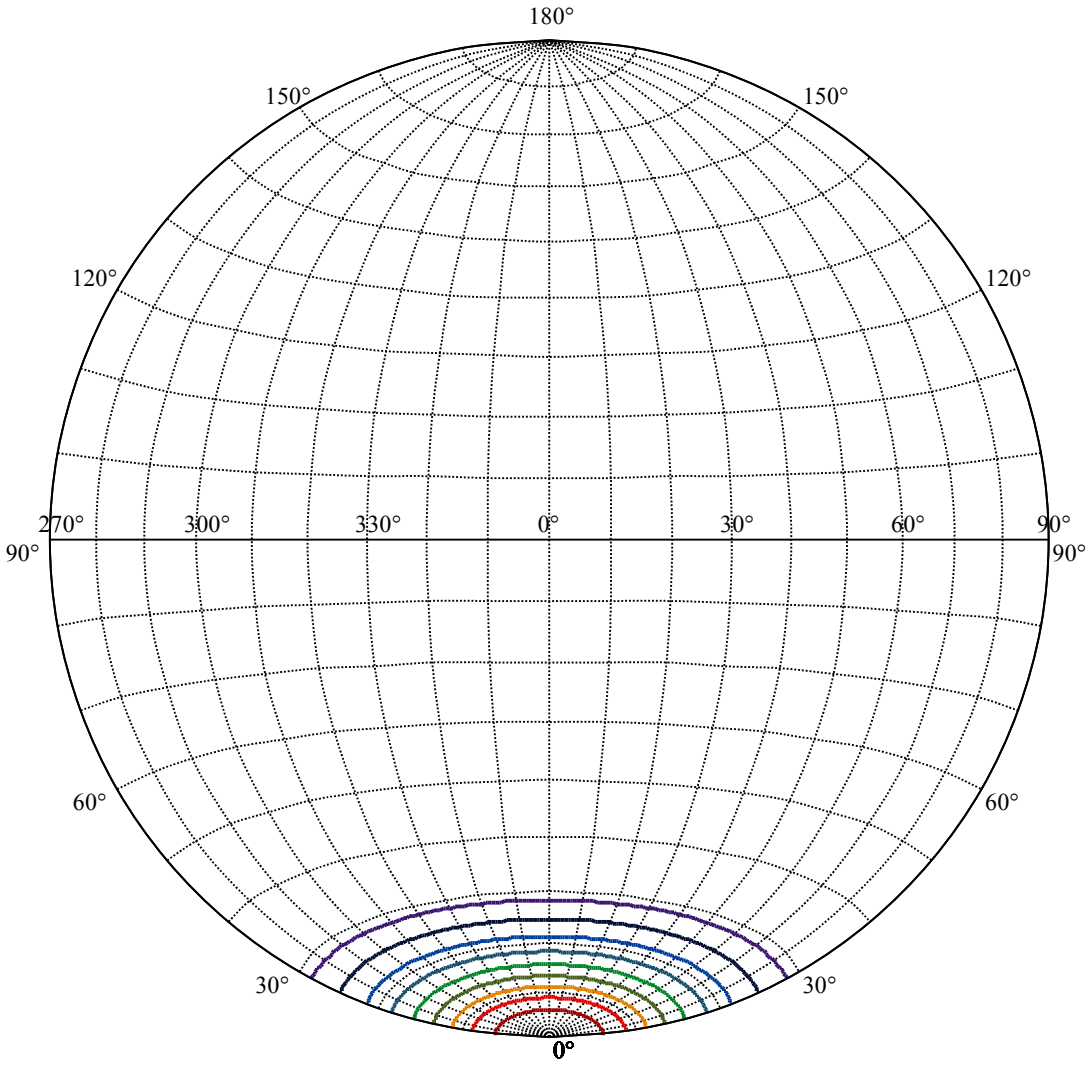


Equipment: GMS1980
Temperature(°C): 10.0

Date: 2019/1/2
Humidity(%): 65.0%

Operator: NT07
Distance(m): 7.50

ISO candela diagram on circular web



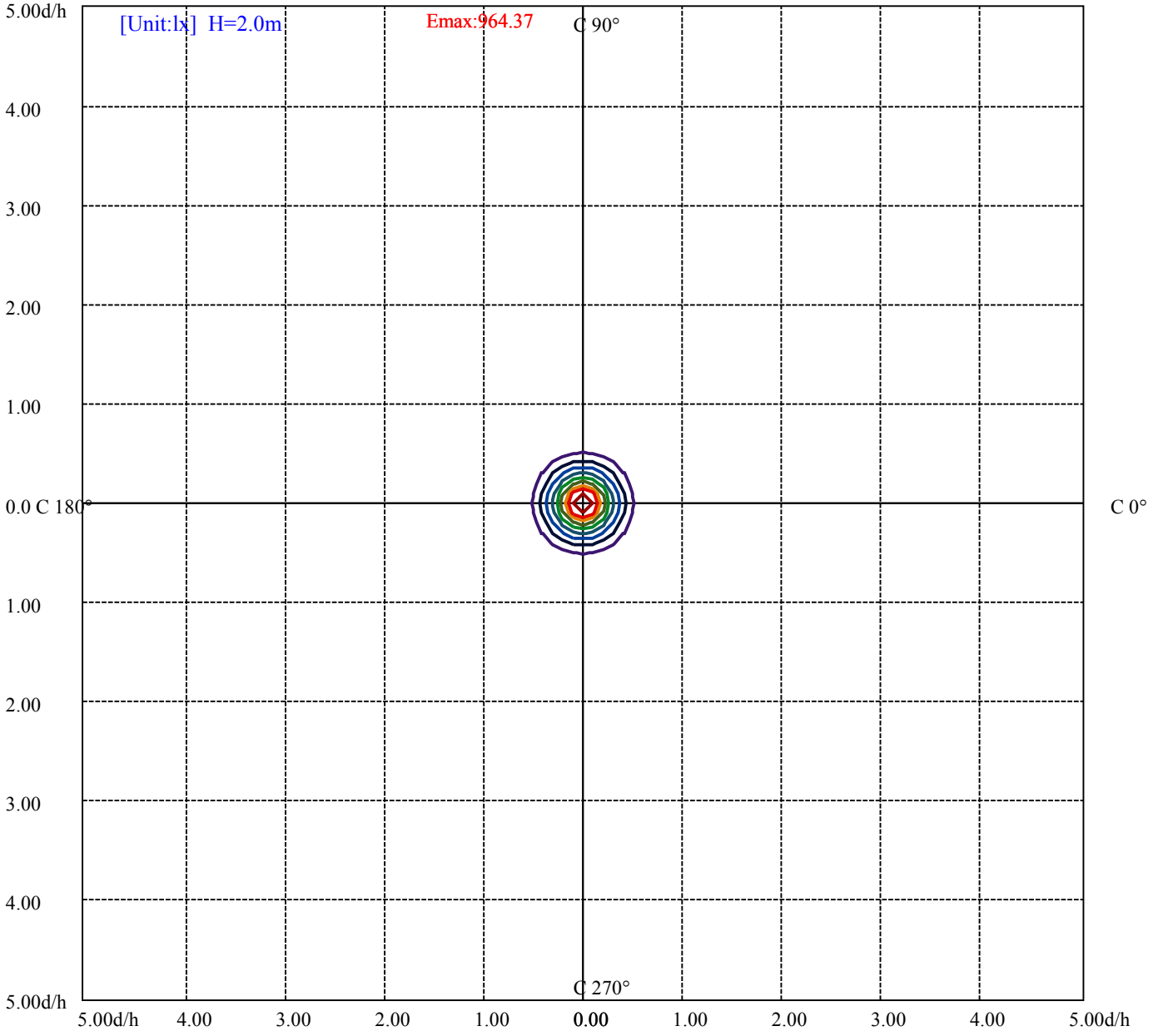
House [Unit:cd] Road

Imax:3857.48

(10%Imax) 385.748
(20%Imax) 771.497
(30%Imax) 1157.25
(40%Imax) 1542.99
(50%Imax) 1928.74
(60%Imax) 2314.49
(70%Imax) 2700.24
(80%Imax) 3085.99
(90%Imax) 3471.74

Equipment: GMS1980 Date: 2019/1/2 Operator: NT07
Temperature(°C): 10.0 Humidity(%): 65.0% Distance(m): 7.50

ISO illuminance diagram

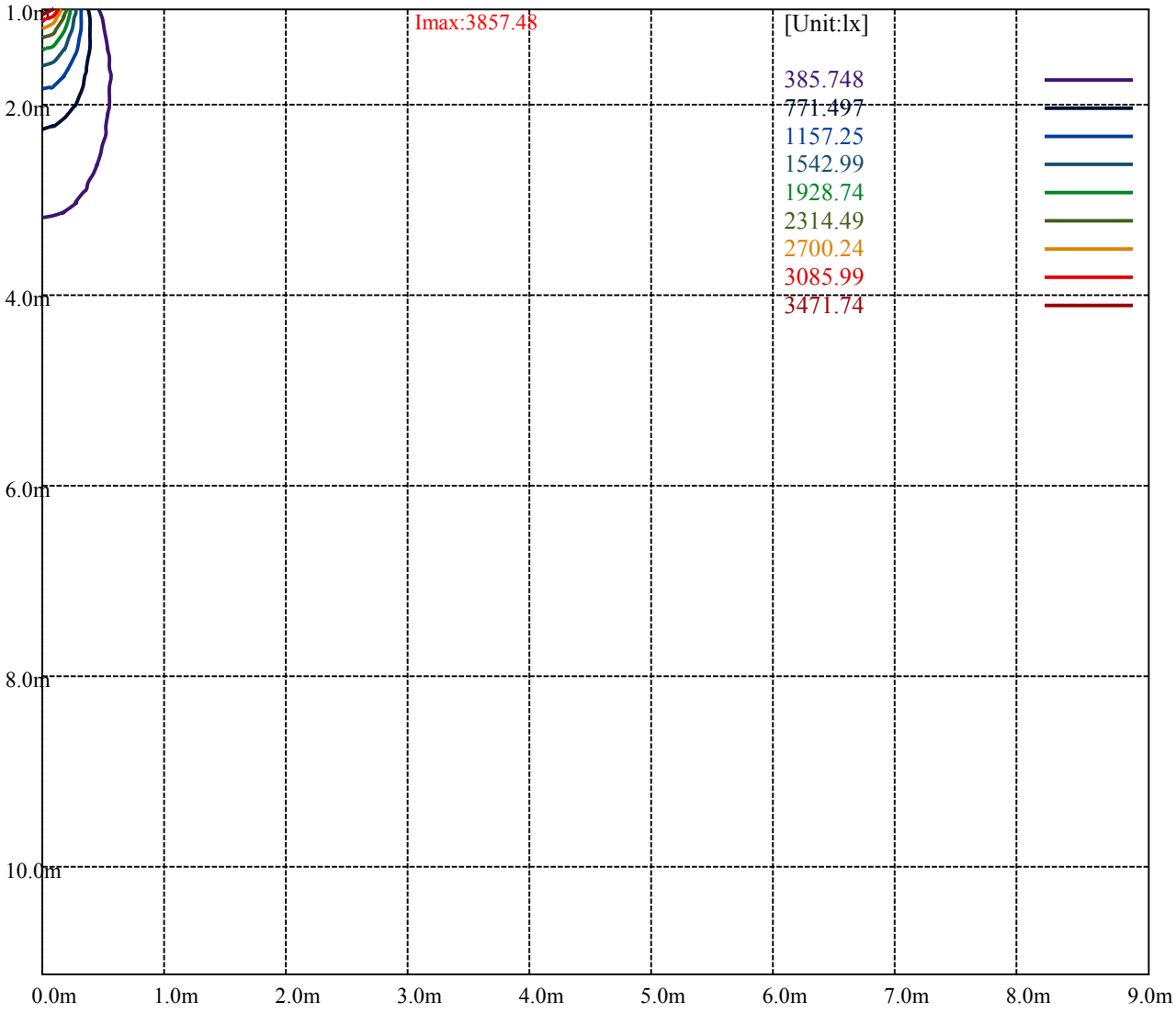


Equipment: GMS1980
Temperature(°C): 10.0

Date: 2019/1/2
Humidity(%): 65.0%

Operator: NT07
Distance(m): 7.50

Space ISO Lux diagram



Equipment: GMS1980
Temperature(°C): 10.0

Date: 2019/1/2
Humidity(%): 65.0%

Operator: NT07
Distance(m): 7.50

Luminance Limitting Curve(no luminous side)

Luminance Table

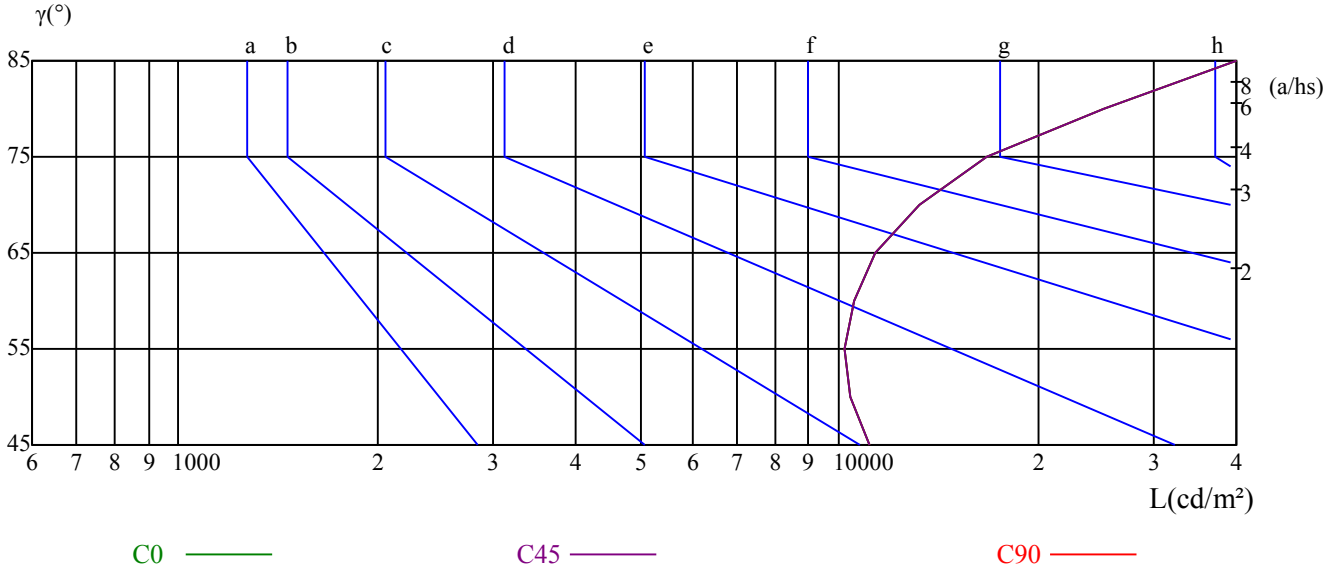
γ	45	50	55	60	65	70	75	80	85
C0	11127	10379	10209	10532	11352	13257	16727	25268	47752
C45	11127	10379	10209	10532	11352	13257	16727	25268	47752
C90	11127	10379	10209	10532	11352	13257	16727	25268	47752

L(Hor)(65)	L(Ver)(65)	L45(65)	L(Hor)(75)	L(Ver)(75)	L45(75)	L(Hor)(85)	L(Ver)(85)	L45(85)
11352	11352	11352	16727	16727	16727	47752	47752	47752

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
Temperature(°C): 10.0

Date: 2019/1/2
Humidity(%): 65.0%

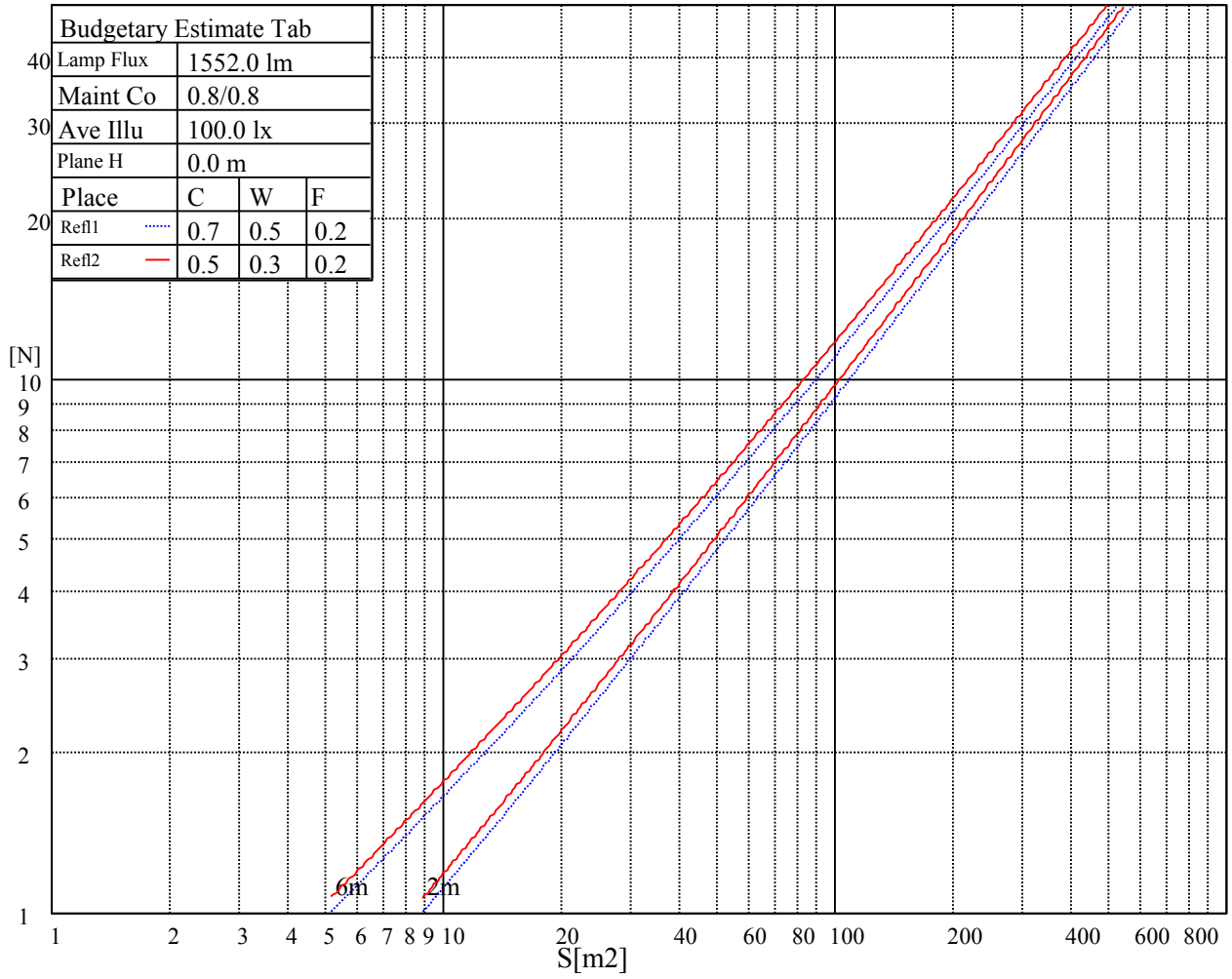
Operator: NT07
Distance(m): 7.50

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	9.39	10.31	9.75	10.63	10.94	9.35	10.28	9.72	10.59	10.91
	3H	12.10	12.92	12.48	13.25	13.62	12.12	12.94	12.50	13.27	13.64
	4H	13.59	14.35	14.00	14.70	15.10	13.71	14.47	14.12	14.82	15.21
	6H	15.35	16.04	15.77	16.42	16.82	15.67	16.37	16.09	16.74	17.14
	8H	16.36	17.01	16.80	17.40	17.82	16.72	17.37	17.15	17.76	18.17
	12H	18.05	18.67	18.49	19.06	19.49	18.31	18.93	18.74	19.31	19.75
4H	2H	10.10	10.85	10.50	11.21	11.60	10.07	10.83	10.48	11.18	11.57
	3H	13.10	13.73	13.52	14.14	14.54	13.13	13.76	13.55	14.17	14.57
	4H	14.79	15.35	15.23	15.77	16.22	14.91	15.46	15.35	15.89	16.34
	6H	16.65	17.12	17.12	17.58	18.05	16.92	17.39	17.39	17.85	18.32
	8H	17.81	18.25	18.29	18.70	19.18	18.11	18.56	18.59	19.01	19.49
	12H	19.45	19.83	19.94	20.32	20.80	19.67	20.05	20.16	20.54	21.02
8H	4H	15.46	15.90	15.94	16.35	16.83	15.55	16.00	16.03	16.45	16.92
	6H	17.65	18.00	18.16	18.50	18.99	17.89	18.24	18.40	18.74	19.23
	8H	19.00	19.31	19.53	19.83	20.33	19.26	19.57	19.79	20.09	20.59
	12H	20.78	21.05	21.31	21.55	22.13	20.96	21.23	21.48	21.73	22.31
12H	4H	15.67	16.05	16.16	16.54	17.02	15.74	16.12	16.23	16.61	17.09
	6H	18.20	18.29	18.51	18.76	19.31	18.40	18.49	18.72	18.97	19.52
	8H	19.45	19.72	19.97	20.22	20.80	19.68	19.95	20.20	20.45	21.03

Variation with the observer position at spacings:		
S = 1.0H	2.0/-1.5	2.0/-1.5
S = 1.5H	2.0/-1.5	2.0/-1.5
S = 2.0H	2.1/-1.1	2.1/-1.1
Standard tables:	BKBF	BKBF
Uncorrected UGR	2.8	2.8

Budgetary Estimate Table

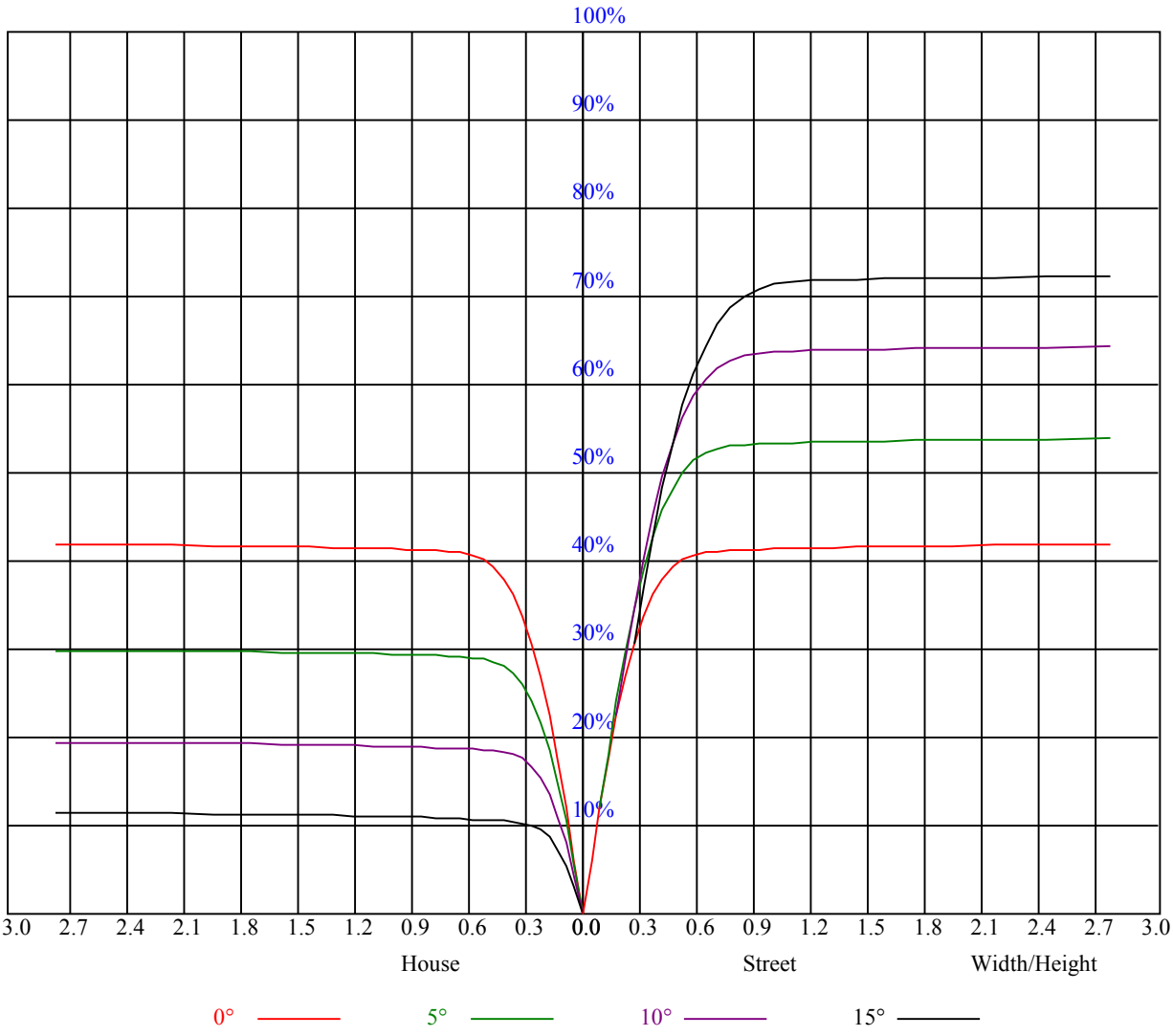


Equipment: GMS1980 Date: 2019/1/2 Operator: NT07
Temperature(°C): 10.0 Humidity(%): 65.0% Distance(m): 7.50

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	0.94	0.93	0.91	0.93	0.91	0.89	0.89	0.88	0.87	0.86	0.85	0.84	0.83	0.82	0.82	0.80
2	0.89	0.87	0.84	0.88	0.85	0.83	0.85	0.83	0.81	0.83	0.81	0.80	0.81	0.79	0.78	0.77
3	0.85	0.82	0.79	0.84	0.81	0.78	0.82	0.79	0.77	0.80	0.78	0.76	0.78	0.76	0.75	0.74
4	0.81	0.78	0.75	0.80	0.77	0.74	0.79	0.76	0.73	0.77	0.75	0.73	0.76	0.73	0.72	0.71
5	0.78	0.74	0.71	0.77	0.73	0.71	0.76	0.73	0.70	0.74	0.72	0.70	0.73	0.71	0.69	0.68
6	0.75	0.71	0.68	0.74	0.70	0.68	0.73	0.70	0.67	0.72	0.69	0.67	0.71	0.68	0.66	0.65
7	0.72	0.68	0.65	0.71	0.68	0.65	0.70	0.67	0.65	0.70	0.67	0.64	0.69	0.66	0.64	0.63
8	0.69	0.65	0.63	0.69	0.65	0.63	0.68	0.65	0.62	0.67	0.64	0.62	0.67	0.64	0.62	0.61
9	0.67	0.63	0.60	0.67	0.63	0.60	0.66	0.63	0.60	0.65	0.62	0.60	0.65	0.62	0.60	0.59
10	0.65	0.61	0.58	0.64	0.61	0.58	0.64	0.60	0.58	0.63	0.60	0.58	0.63	0.60	0.58	0.57

Coefficient Utilization Curve



Equipment: GMS1980	Date: 2019/1/2	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	3857.06	3839.06	3796.88	3732.19	3663.00	3584.25	3443.63	3318.19	3207.38
45.0	3862.69	3840.19	3796.31	3740.63	3661.31	3560.06	3450.38	3305.25	3167.44
90.0	3858.19	3835.13	3794.63	3713.63	3647.81	3552.19	3421.69	3269.81	3129.75
135.0	3852.00	3858.19	3840.19	3800.81	3744.00	3664.69	3556.69	3439.13	3307.50
180.0	3857.06	3864.38	3842.44	3807.00	3741.75	3662.44	3561.75	3412.13	3278.81
225.0	3862.69	3862.69	3846.38	3796.31	3744.56	3668.63	3563.44	3436.31	3308.06
270.0	3858.19	3859.88	3840.19	3801.94	3740.06	3659.63	3582.00	3447.00	3322.69
315.0	3852.00	3827.25	3787.88	3729.38	3645.56	3558.94	3457.13	3302.44	3169.13
360.0	3857.06	3839.06	3796.88	3732.19	3663.00	3584.25	3443.63	3318.19	3207.38

C/γ(°)	9.0	10.0	11.0	12.0	13.0	14.0	15.0	16.0	17.0
0.0	3006.56	2852.44	2708.44	2503.69	2323.69	2189.81	1995.19	1846.13	1702.13
45.0	2996.44	2821.50	2655.00	2495.81	2302.31	2145.94	1985.06	1816.31	1676.81
90.0	2957.06	2777.63	2618.44	2444.63	2288.81	2109.38	1935.56	1787.63	1641.94
135.0	3129.19	2973.38	2814.75	2653.31	2460.38	2305.13	2126.25	1967.06	1825.88
180.0	3134.25	2943.56	2792.25	2634.19	2463.75	2298.94	2148.75	1990.13	1848.38
225.0	3145.50	2971.69	2809.13	2629.13	2465.44	2284.88	2112.19	1964.25	1822.50
270.0	3162.94	2994.75	2833.88	2673.56	2473.31	2311.31	2155.50	1964.81	1819.69
315.0	3019.50	2822.63	2657.25	2495.81	2313.00	2138.63	1985.63	1819.13	1679.63
360.0	3006.56	2852.44	2708.44	2503.69	2323.69	2189.81	1995.19	1846.13	1702.13

C/γ(°)	18.0	19.0	20.0	21.0	22.0	23.0	24.0	25.0	26.0
0.0	1541.81	1423.13	1308.38	1177.31	1074.38	966.38	830.25	718.31	623.81
45.0	1539.00	1400.63	1272.38	1170.56	1050.75	936.56	811.69	693.56	577.69
90.0	1473.75	1347.19	1194.75	1095.58	976.84	869.57	759.83	634.95	537.19
135.0	1685.25	1532.81	1391.63	1274.06	1144.69	1038.38	924.19	806.63	689.63
180.0	1697.06	1549.69	1425.38	1288.69	1112.18	1046.36	941.40	801.00	691.03
225.0	1654.88	1527.75	1409.63	1260.56	1120.39	1043.27	924.24	799.82	697.16
270.0	1680.19	1539.00	1401.19	1284.75	1165.50	1058.06	937.69	812.25	704.25
315.0	1539.00	1404.56	1293.19	1117.52	1052.49	945.45	832.95	698.63	591.19
360.0	1541.81	1423.13	1308.38	1177.31	1074.38	966.38	830.25	718.31	623.81

C/γ(°)	27.0	28.0	29.0	30.0	31.0	32.0	33.0	34.0	35.0
0.0	497.81	392.06	307.13	286.31	148.16	104.12	73.52	58.11	45.11
45.0	471.94	370.13	286.31	240.24	142.59	94.73	67.39	52.48	39.99
90.0	447.58	342.84	266.40	197.21	133.31	86.79	62.44	48.66	38.76
135.0	573.19	462.38	372.38	298.13	189.23	128.08	86.91	57.60	46.52
180.0	584.27	485.44	369.17	284.96	208.46	128.53	87.53	62.66	48.99
225.0	577.41	468.45	379.86	285.02	212.40	140.51	90.96	64.69	51.13
270.0	585.00	478.69	387.56	306.56	241.03	150.58	103.73	68.40	53.83
315.0	495.34	380.25	297.96	221.29	149.79	101.14	73.52	55.97	44.27
360.0	497.81	392.06	307.13	286.31	148.16	104.12	73.52	58.11	45.11

C/γ(°)	36.0	37.0	38.0	39.0	40.0	41.0	42.0	43.0	44.0
0.0	36.06	29.14	24.30	20.81	18.45	16.93	15.41	14.63	14.01
45.0	32.96	26.04	21.32	18.96	17.27	15.30	14.23	13.61	12.88
90.0	30.99	23.91	21.09	18.56	16.76	15.47	14.63	13.84	13.28
135.0	37.58	29.08	23.12	20.59	18.11	16.59	15.08	14.06	13.50
180.0	38.31	31.50	25.03	21.83	19.46	17.49	16.20	15.08	14.29
225.0	38.64	31.89	25.93	22.11	19.63	17.61	16.03	14.63	13.89
270.0	42.69	33.75	27.11	23.51	20.59	18.34	16.59	15.19	14.40
315.0	35.27	28.80	24.08	20.76	18.39	16.59	15.36	14.46	13.95
360.0	36.06	29.14	24.30	20.81	18.45	16.93	15.41	14.63	14.01

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	13.50	13.05	12.66	12.32	12.04	11.70	11.42	11.19	10.97
45.0	12.43	12.09	11.64	11.31	11.03	10.69	10.52	10.24	9.90
90.0	12.77	12.26	11.87	11.53	11.19	10.86	10.63	10.29	10.07
135.0	12.88	12.38	11.93	11.53	11.08	10.74	10.41	10.13	9.84
180.0	13.67	13.22	12.60	12.15	11.70	11.25	10.86	10.52	10.18
225.0	13.33	12.77	12.26	11.87	11.53	11.14	10.80	10.46	10.24
270.0	13.78	13.22	12.83	12.49	12.04	11.70	11.42	11.14	10.91
315.0	13.44	12.99	12.60	12.32	11.93	11.64	11.36	11.03	10.86
360.0	13.50	13.05	12.66	12.32	12.04	11.70	11.42	11.19	10.97

C/γ(°)	54.0	55.0	56.0	57.0	58.0	59.0	60.0	61.0	62.0
0.0	10.74	10.41	10.24	10.01	9.79	9.56	9.39	9.17	8.94
45.0	9.73	9.51	9.34	9.11	9.00	8.78	8.66	8.49	8.38
90.0	9.79	9.56	9.34	9.17	8.94	8.78	8.61	8.49	8.33
135.0	9.62	9.34	9.00	8.83	8.61	8.44	8.27	8.10	7.93
180.0	9.79	9.56	9.28	9.06	8.78	8.55	8.44	8.16	7.99
225.0	9.90	9.68	9.39	9.23	8.94	8.72	8.55	8.33	8.16
270.0	10.63	10.41	10.18	9.96	9.79	9.62	9.45	9.23	9.11
315.0	10.58	10.29	10.18	9.96	9.73	9.56	9.45	9.23	9.11
360.0	10.74	10.41	10.24	10.01	9.79	9.56	9.39	9.17	8.94

C/γ(°)	63.0	64.0	65.0	66.0	67.0	68.0	69.0	70.0	71.0
0.0	8.83	8.66	8.61	8.49	8.44	8.38	8.38	8.49	8.55
45.0	8.27	8.21	8.04	7.99	7.88	7.76	7.76	7.65	7.65
90.0	8.16	7.99	7.82	7.71	7.59	7.43	7.31	7.26	7.20
135.0	7.76	7.59	7.48	7.37	7.26	7.14	7.09	6.98	6.92
180.0	7.88	7.71	7.54	7.43	7.31	7.26	7.20	7.09	6.98
225.0	7.99	7.82	7.65	7.54	7.37	7.26	7.14	7.09	6.98
270.0	8.94	8.78	8.61	8.49	8.33	8.21	8.10	8.04	7.93
315.0	9.06	8.89	8.78	8.66	8.55	8.49	8.38	8.38	8.33
360.0	8.83	8.66	8.61	8.49	8.44	8.38	8.38	8.49	8.55

C/γ(°)	72.0	73.0	74.0	75.0	76.0	77.0	78.0	79.0	80.0
0.0	8.72	8.72	8.72	8.61	8.55	8.33	8.33	8.83	9.56
45.0	7.59	7.54	7.48	7.43	7.43	7.43	7.37	7.37	7.76
90.0	7.09	6.98	6.92	6.92	6.86	6.86	6.86	6.86	6.86
135.0	6.81	6.64	6.53	6.36	6.36	6.30	6.24	6.24	6.19
180.0	6.92	6.75	6.64	6.58	6.53	6.41	6.36	6.30	6.24
225.0	6.98	6.86	6.69	6.58	6.53	6.47	6.47	6.41	6.41
270.0	7.88	7.82	7.65	7.59	7.48	7.43	7.31	7.26	7.20
315.0	8.33	8.21	8.21	8.16	8.04	7.93	7.93	8.16	8.78
360.0	8.72	8.72	8.72	8.61	8.55	8.33	8.33	8.83	9.56

C/γ(°)	81.0	82.0	83.0	84.0	85.0	86.0	87.0	88.0	89.0
0.0	10.07	9.45	8.04	7.76	7.82	7.88	7.88	5.96	5.91
45.0	8.16	8.16	7.82	7.88	7.76	7.65	6.13	5.96	5.79
90.0	6.92	6.98	7.09	7.09	6.98	6.41	6.08	5.85	5.85
135.0	6.13	6.08	6.02	6.02	6.02	5.91	5.96	5.96	5.96
180.0	6.24	6.19	6.19	6.13	6.08	6.02	6.02	5.96	6.02
225.0	6.41	6.36	6.41	6.30	6.30	6.30	5.96	5.96	5.85
270.0	7.14	7.14	7.20	7.09	7.14	7.31	7.31	5.96	5.91
315.0	9.06	8.55	7.71	7.82	7.88	7.93	8.04	5.96	5.91
360.0	10.07	9.45	8.04	7.76	7.82	7.88	7.88	5.96	5.91

Intensity data(cd)

C/γ(°)	90.0
0.0	5.74
45.0	5.74
90.0	5.74
135.0	5.91
180.0	5.96
225.0	5.91
270.0	5.79
315.0	5.85
360.0	5.74