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Nata

LumCAT: 2-1680-M
Luminaire: 92.70.126.00

Report No: NATA0100	Voltage(V): 35.3000
Test No: GC2018090802	Current(A): 0.4100
LampCAT: LUMINUS CHM-9-XD20	Power (W): 14.4370
Lamp flux(lm): 1946.0	PF: 0.0000
Number of Lamps: 1	Ballast type: DC
Length(mm): 70	Width(mm): 70
Phm Type: C	Height(mm): 0

Photometric Results

Lumens(lm): 1794.10
Efficiency(%): 92.19%
Lumens(lm)/Power(W): 124.27
Central intensity(cd): 6473.671
Maximum intensity(cd): 6473.671
Angle of maximum intensity: C=0.0 γ=0.0
Beam Angle(50%Imax): [C0/180]Total=24.2
[C90/270]Total=24.2
Field angle(10%Imax): [C0/180]Total=63.7
[C90/270]Total=63.7
Maximum s/h(1/2): C0_180=0.41 C90_270=0.41
Maximum s/h(1/4): C0_180=0.39 C90_270=0.39
Up flux rate of lamp(%): 0.00%
Down flux rate of lamp(%): 92.27%
Up flux rate of LUM(%): - -
Down flux rate of LUM(%): 100.00%
CIE Type : Direct lighting
Output flux ratio in π solid angle : 98.536%

Equipment: GMS1980	Date: 2018/9/8	Operator: NT07
Temperature(°C): 25.0	Humidity(%): 60.0%	Distance(m): 7.50

Zonal flux distribution table

γ(°)	Average I(cd)	Zonal F(lm)	Sum F(lm)	Eff Flux(%)	Eff Sum(%)
0.0	6473.672	1.549	1.549	.080%	.086%
1.0	6465.797	12.375	13.923	.636%	.776%
2.0	6445.828	24.669	38.592	1.268%	2.151%
3.0	6389.367	36.670	75.262	1.884%	4.195%
4.0	6290.156	48.117	123.379	2.473%	6.877%
5.0	6124.992	58.540	181.919	3.008%	10.140%
6.0	5853.305	67.095	249.014	3.448%	13.880%
7.0	5463.422	73.015	322.028	3.752%	17.949%
8.0	5131.406	78.315	400.343	4.024%	22.314%
9.0	4665.445	80.035	480.378	4.113%	26.775%
10.0	4189.008	79.769	560.147	4.099%	31.222%
11.0	3748.219	78.429	638.575	4.030%	35.593%
12.0	3288.375	74.974	713.55	3.853%	39.772%
13.0	2782.828	68.648	782.197	3.528%	43.598%
14.0	2368.195	62.827	845.024	3.229%	47.100%
15.0	2009.461	57.033	902.057	2.931%	50.279%
16.0	1674.422	50.612	952.669	2.601%	53.100%
17.0	1427.344	45.763	998.432	2.352%	55.651%
18.0	1194.377	40.474	1038.906	2.080%	57.907%
19.0	1067.133	38.099	1077.005	1.958%	60.030%
20.0	960.427	36.022	1113.027	1.851%	62.038%
21.0	887.829	34.891	1147.918	1.793%	63.983%
22.0	832.008	34.179	1182.097	1.756%	65.888%
23.0	796.500	34.128	1216.225	1.754%	67.790%
24.0	767.398	34.228	1250.453	1.759%	69.698%
25.0	742.725	34.421	1284.875	1.769%	71.616%
26.0	725.829	34.892	1319.767	1.793%	73.561%
27.0	710.290	35.362	1355.129	1.817%	75.532%
28.0	695.911	35.827	1390.956	1.841%	77.529%
29.0	680.948	36.202	1427.158	1.860%	79.547%
30.0	668.419	36.650	1463.808	1.883%	81.590%
31.0	656.487	37.078	1500.886	1.905%	83.657%
32.0	645.441	37.507	1538.394	1.927%	85.747%
33.0	634.120	37.873	1576.267	1.946%	87.858%
34.0	610.678	37.448	1613.714	1.924%	89.945%
35.0	560.208	35.236	1648.951	1.811%	91.909%
36.0	481.676	31.047	1679.998	1.595%	93.640%
37.0	385.052	25.412	1705.41	1.306%	95.056%

Zonal flux distribution table

γ(°)	Average I(cd)	Zonal F(lm)	Sum F(lm)	Eff Flux(%)	Eff Sum(%)
38.0	291.087	19.652	1725.063	1.010%	96.152%
39.0	217.807	15.031	1740.094	.772%	96.990%
40.0	102.080	7.195	1747.289	.370%	97.391%
41.0	48.473	3.487	1750.777	.179%	97.585%
42.0	27.197	1.996	1752.772	.103%	97.696%
43.0	19.547	1.462	1754.234	.075%	97.778%
44.0	14.590	1.111	1755.346	.057%	97.840%
45.0	12.488	0.968	1756.314	.050%	97.894%
46.0	11.756	0.927	1757.241	.048%	97.945%
47.0	11.138	0.893	1758.134	.046%	97.995%
48.0	10.884	0.887	1759.021	.046%	98.045%
49.0	10.638	0.880	1759.902	.045%	98.094%
50.0	10.392	0.873	1760.775	.045%	98.142%
51.0	10.188	0.868	1761.643	.045%	98.191%
52.0	9.991	0.863	1762.507	.044%	98.239%
53.0	9.823	0.860	1763.367	.044%	98.287%
54.0	9.668	0.858	1764.225	.044%	98.335%
55.0	9.506	0.854	1765.078	.044%	98.382%
56.0	9.359	0.851	1765.929	.044%	98.430%
57.0	9.225	0.848	1766.778	.044%	98.477%
58.0	9.077	0.844	1767.622	.043%	98.524%
59.0	8.965	0.843	1768.465	.043%	98.571%
60.0	8.852	0.841	1769.305	.043%	98.618%
61.0	8.747	0.839	1770.144	.043%	98.665%
62.0	8.648	0.837	1770.982	.043%	98.711%
63.0	8.564	0.837	1771.818	.043%	98.758%
64.0	8.480	0.836	1772.654	.043%	98.804%
65.0	8.416	0.836	1773.491	.043%	98.851%
66.0	8.332	0.835	1774.325	.043%	98.898%
67.0	8.283	0.836	1775.161	.043%	98.944%
68.0	8.213	0.835	1775.996	.043%	98.991%
69.0	8.156	0.835	1776.831	.043%	99.037%
70.0	8.107	0.835	1777.667	.043%	99.084%
71.0	8.058	0.835	1778.502	.043%	99.130%
72.0	8.023	0.837	1779.339	.043%	99.177%
73.0	7.995	0.838	1780.177	.043%	99.224%
74.0	7.959	0.839	1781.016	.043%	99.271%
75.0	7.924	0.839	1781.856	.043%	99.317%

Zonal flux distribution table

γ(°)	Average I(cd)	Zonal F(lm)	Sum F(lm)	Eff Flux(%)	Eff Sum(%)
76.0	7.896	0.840	1782.696	.043%	99.364%
77.0	7.889	0.843	1783.539	.043%	99.411%
78.0	7.868	0.844	1784.383	.043%	99.458%
79.0	7.840	0.844	1785.227	.043%	99.505%
80.0	7.826	0.845	1786.072	.043%	99.552%
81.0	7.826	0.848	1786.92	.044%	99.600%
82.0	7.812	0.848	1787.768	.044%	99.647%
83.0	7.798	0.849	1788.617	.044%	99.694%
84.0	7.798	0.850	1789.467	.044%	99.742%
85.0	7.777	0.850	1790.317	.044%	99.789%
86.0	7.727	0.845	1791.162	.043%	99.836%
87.0	7.685	0.842	1792.003	.043%	99.883%
88.0	7.664	0.840	1792.843	.043%	99.930%
89.0	7.664	0.840	1793.684	.043%	99.977%
90.0	7.671	0.421	1794.104	.022%	100.000%

Zonal flux distribution table

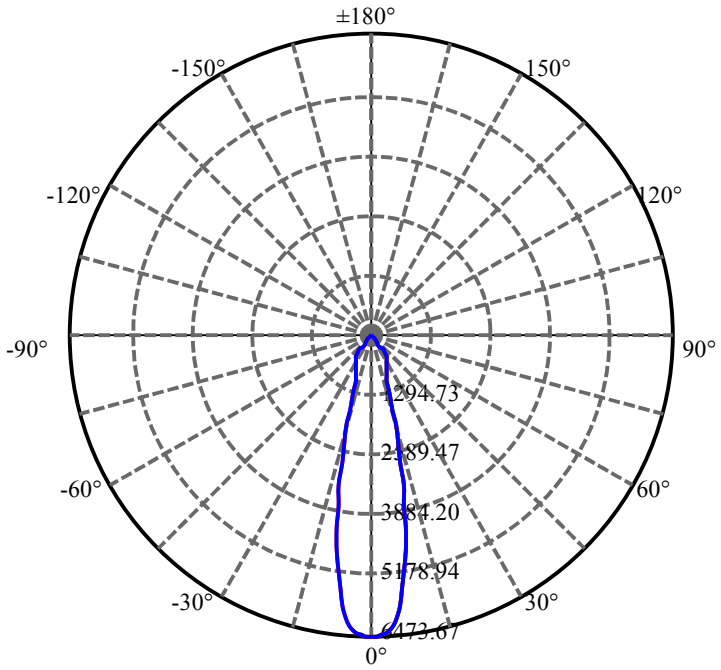
ZONAL LUMEN SUMMARY

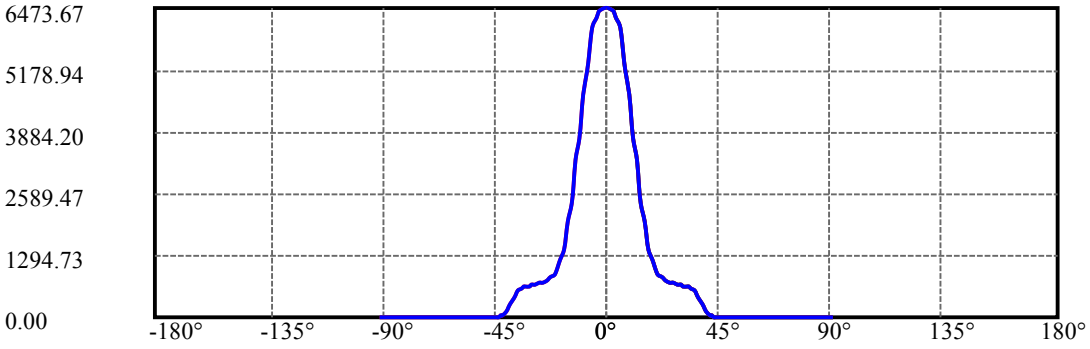
Zone	Lumens	%Lamp	%Fixt
0-30	1463.81	75.22%	81.59%
0-40	1747.29	89.79%	97.39%
0-60	1769.31	90.92%	98.62%
0-90	1793.68	92.17%	99.98%
0-120	1793.68	92.17%	99.98%
0-180	1794.10	92.19%	100.00%
60-90	25.22	1.30%	1.41%
90-120	0.00	0.00%	0.00%
90-130	0.00	0.00%	0.00%
90-150	0.00	0.00%	0.00%
90-180	0.00	0.00%	0.00%
0-29.22	1435.28	73.76%	80.00%

ZONAL LUMEN SUMMARY

0-10	560.15
10-20	552.88
20-30	350.78
30-40	283.48
40-50	13.49
50-60	8.53
60-70	8.36
70-80	8.41
80-90	7.61
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):

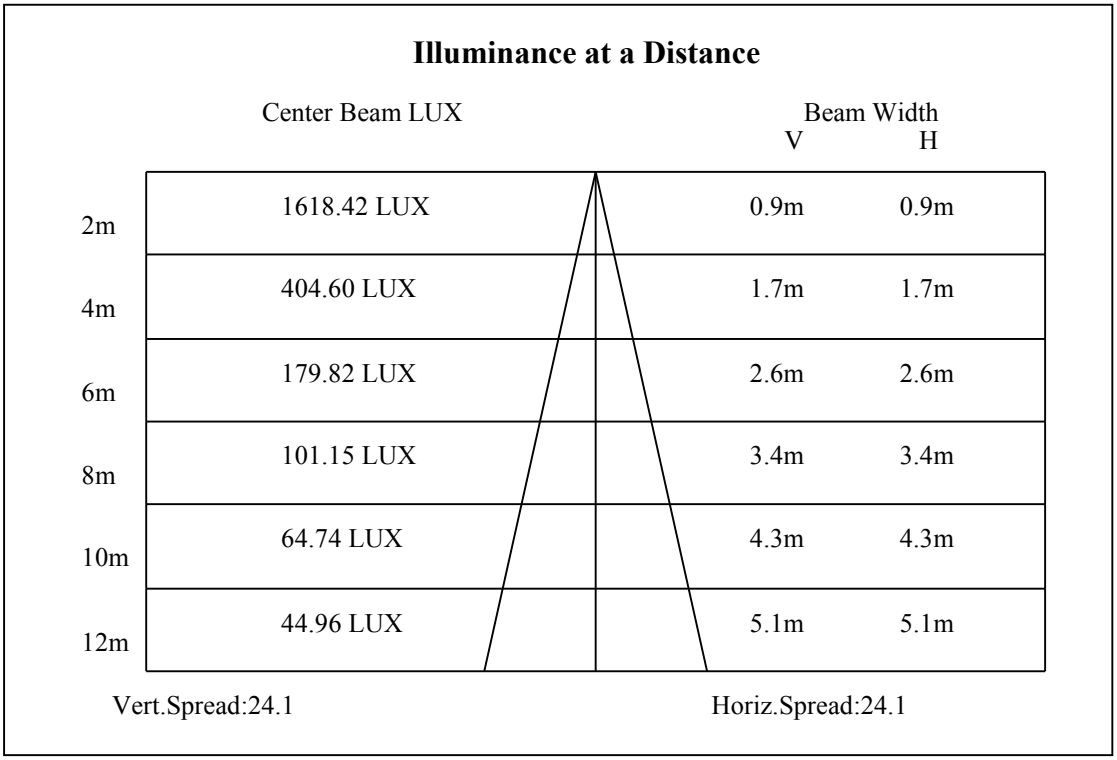
C0/C180:

C90/C270:

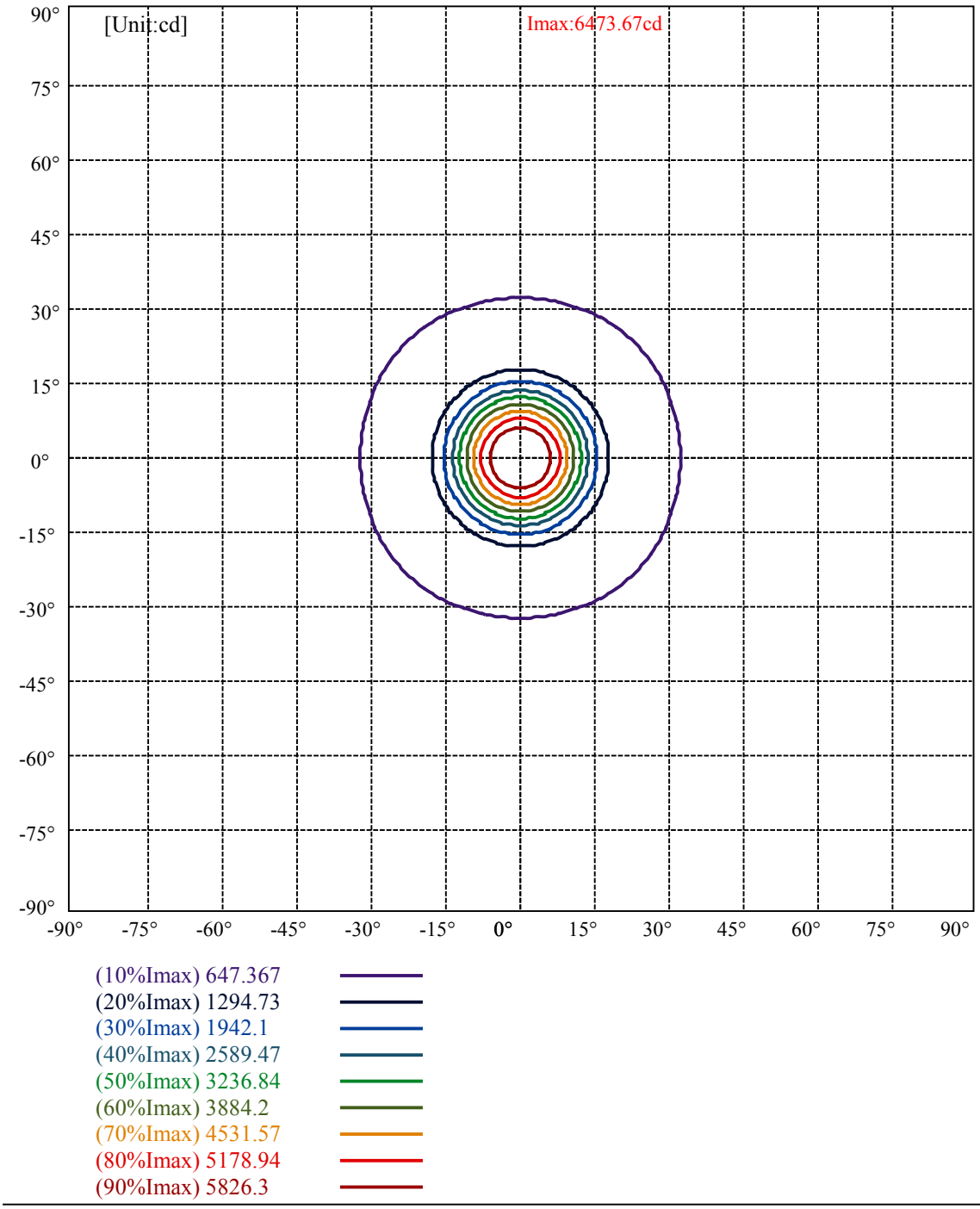
Field angle(10%Imax):C0/180Left:31.8 Right:31.8
:C90/270Left:31.8 Right:31.8

Beam Angle(50%Imax):C0/180Left:12.1 Right:12.1
:C90/270Left:12.1 Right:12.1

Lux distance Curve



ISO-Intensity(V-H)



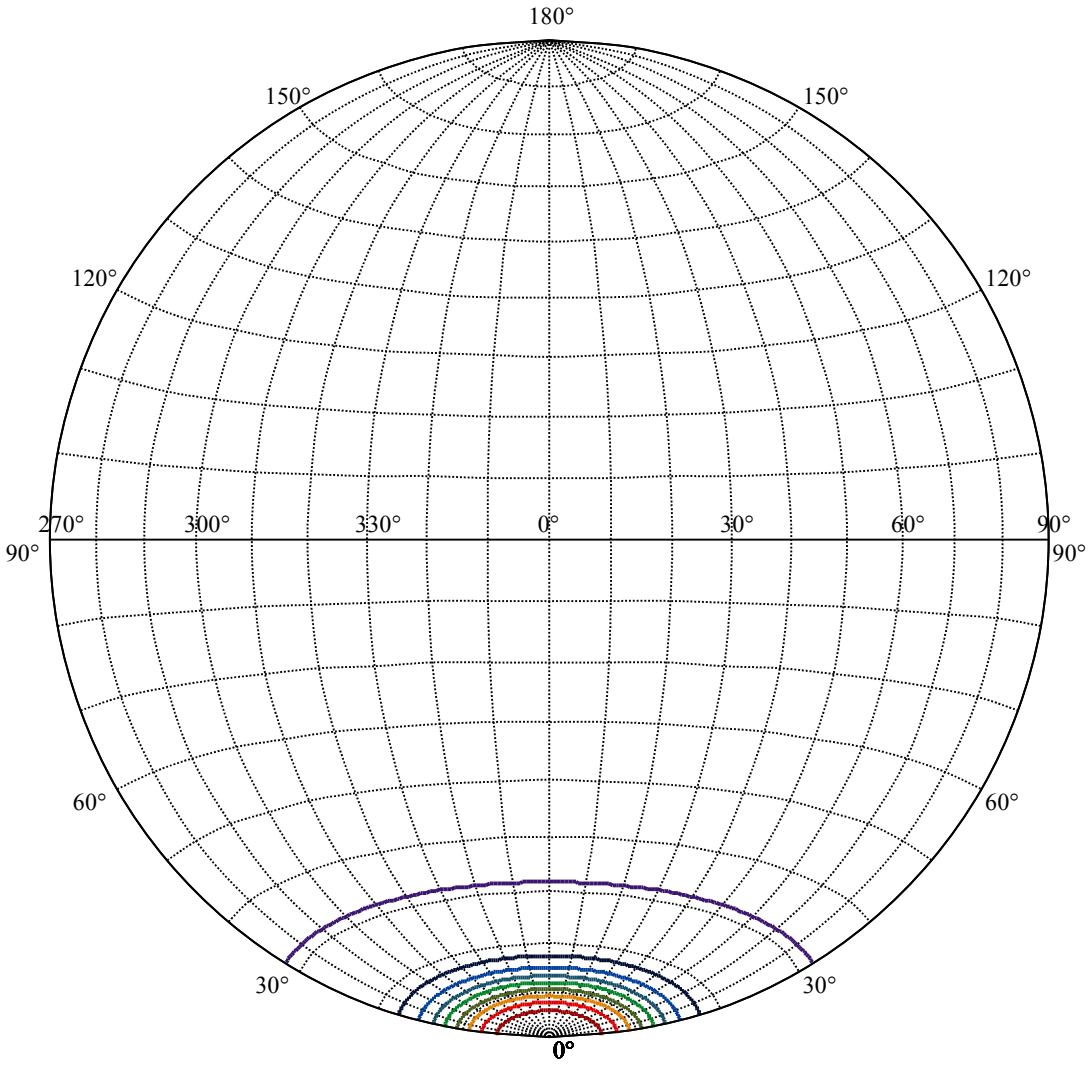
(10%Imax) 647.367
(20%Imax) 1294.73
(30%Imax) 1942.1
(40%Imax) 2589.47
(50%Imax) 3236.84
(60%Imax) 3884.2
(70%Imax) 4531.57
(80%Imax) 5178.94
(90%Imax) 5826.3

Equipment: GMS1980
Temperature(°C): 25.0

Date: 2018/9/8
Humidity(%): 60.0%

Operator: NT07
Distance(m): 7.50

ISO candela diagram on circular web



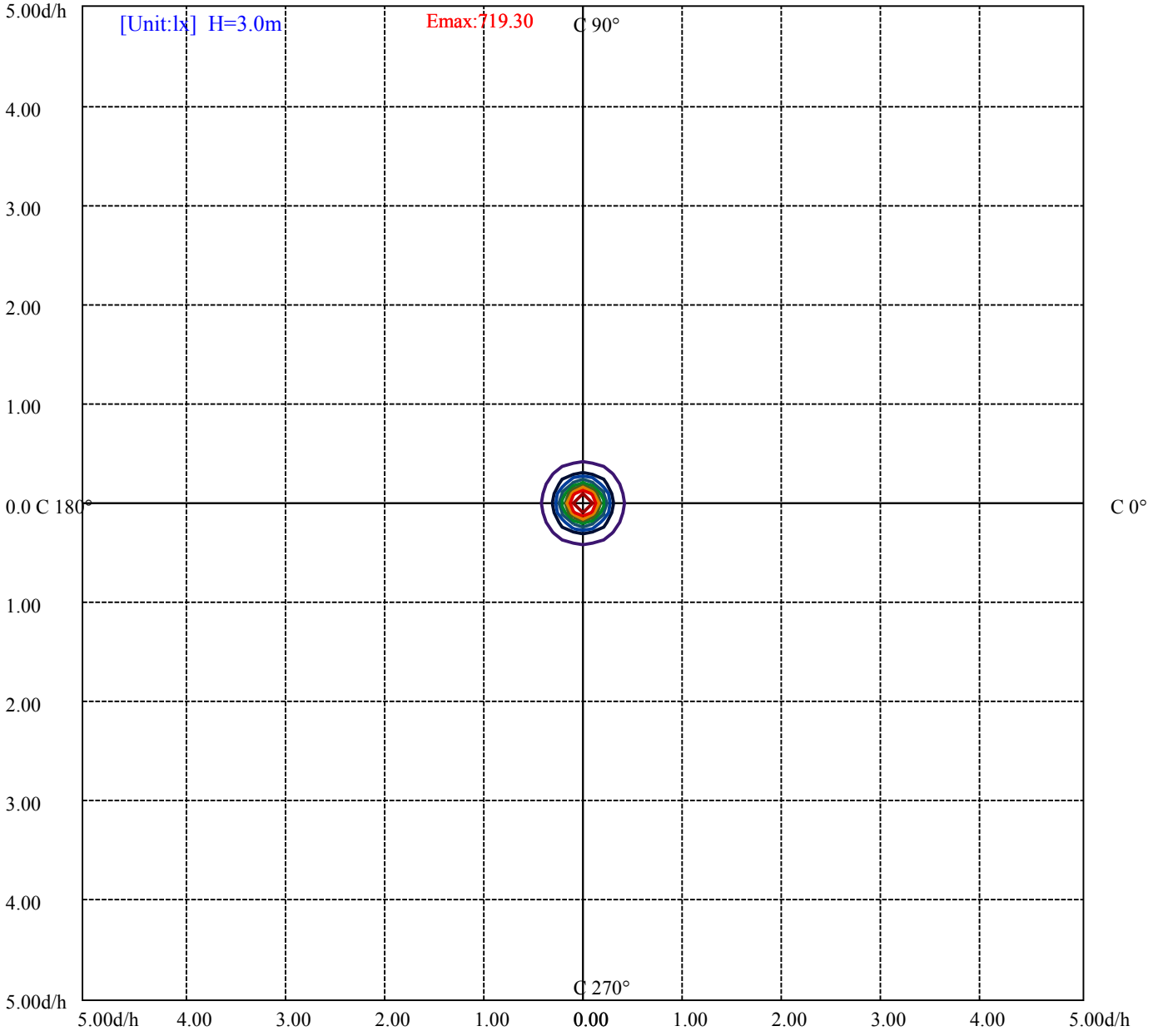
House [Unit:cd] Road

Imax:6473.67

(10%Imax) 647.367
(20%Imax) 1294.73
(30%Imax) 1942.1
(40%Imax) 2589.47
(50%Imax) 3236.84
(60%Imax) 3884.2
(70%Imax) 4531.57
(80%Imax) 5178.94
(90%Imax) 5826.3

Equipment: GMS1980 Date: 2018/9/8 Operator: NT07
Temperature(°C): 25.0 Humidity(%): 60.0% Distance(m): 7.50

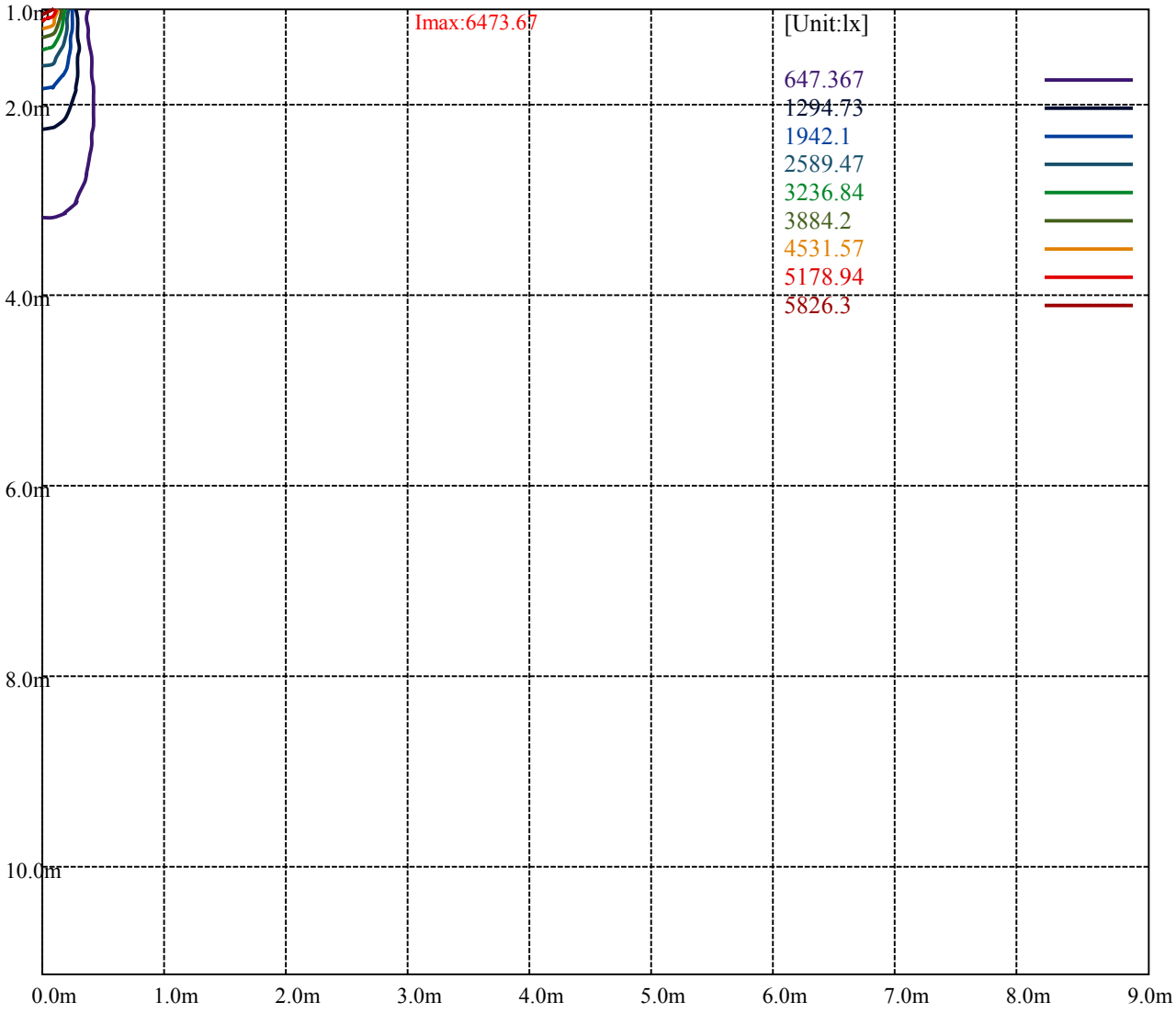
ISO illuminance diagram



(10%Emax) 71.92966
(20%Emax) 143.8589
(30%Emax) 215.7889
(40%Emax) 287.7189
(50%Emax) 359.6489
(60%Emax) 431.5778
(70%Emax) 503.5078
(80%Emax) 575.4377
(90%Emax) 647.3666

Equipment: GMS1980
Temperature(°C): 25.0
Date: 2018/9/8
Humidity(%): 60.0%
Operator: NT07
Distance(m): 7.50

Space ISO Lux diagram



Equipment: GMS1980
Temperature(°C): 25.0

Date: 2018/9/8
Humidity(%): 60.0%

Operator: NT07
Distance(m): 7.50

Nata 2-1680-M

Luminance Limitting Curve(no luminous side)

Luminance Table

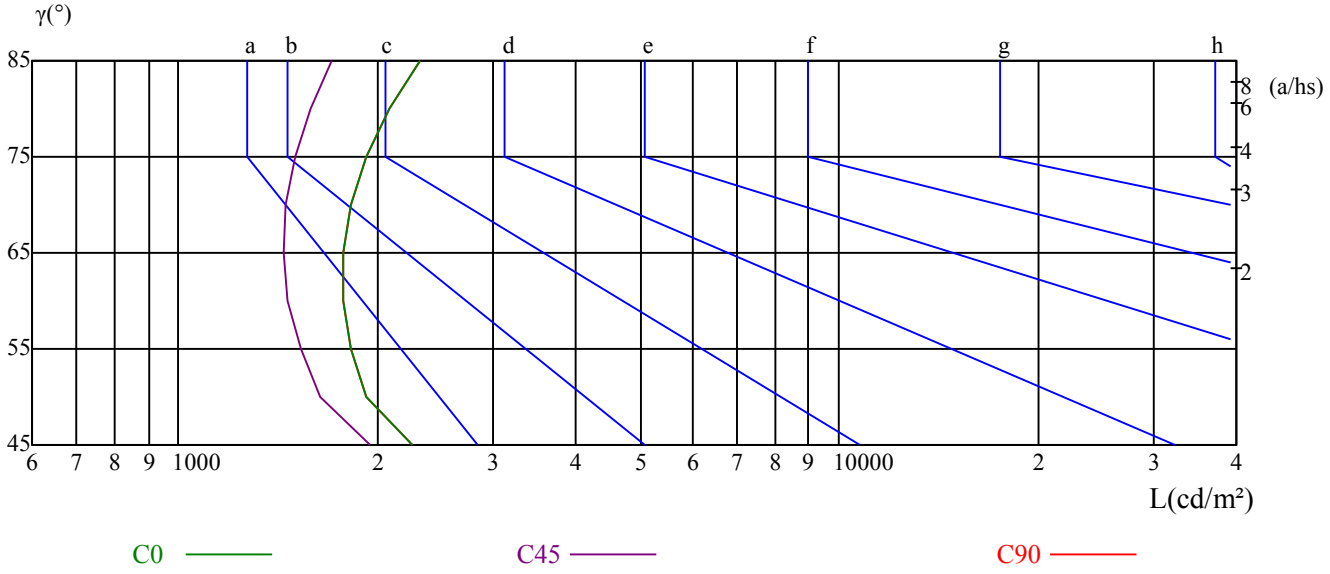
γ	45	50	55	60	65	70	75	80	85
C0	2253	1924	1822	1772	1777	1826	1929	2089	2317
C45	1950	1641	1529	1463	1441	1452	1500	1582	1702
C90	2253	1924	1822	1772	1777	1826	1929	2089	2317

L(Hor)(65)	L(Ver)(65)	L45(65)	L(Hor)(75)	L(Ver)(75)	L45(75)	L(Hor)(85)	L(Ver)(85)	L45(85)
4064	4064	4064	6248	6248	6248	18209	18209	18209

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): 25.0

Date: 2018/9/8
Humidity(%): 60.0%

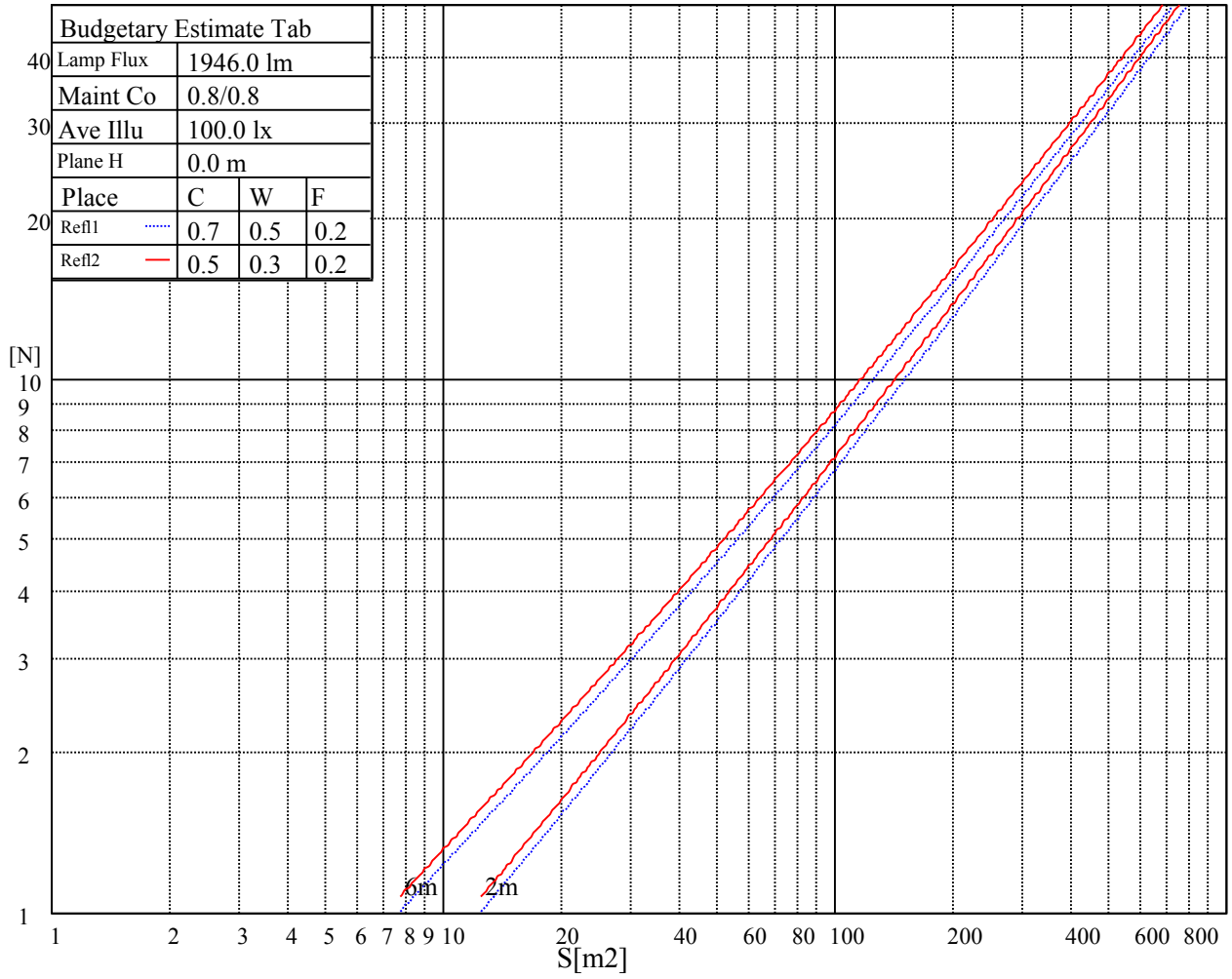
Operator: NT07
Distance(m): 7.50

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	1.41	2.32	1.77	2.63	2.95	1.37	2.28	1.73	2.59	2.91
	3H	3.55	4.36	3.94	4.69	5.06	3.49	4.30	3.88	4.63	5.00
	4H	4.74	5.48	5.15	5.84	6.23	4.66	5.41	5.07	5.76	6.16
	6H	6.01	6.69	6.43	7.06	7.46	5.91	6.59	6.33	6.97	7.37
	8H	6.65	7.29	7.09	7.68	8.09	6.54	7.18	6.98	7.57	7.99
	12H	7.65	8.26	8.09	8.65	9.08	7.53	8.14	7.97	8.52	8.96
4H	2H	1.86	2.60	2.27	2.96	3.35	1.82	2.57	2.23	2.92	3.32
	3H	4.30	4.91	4.72	5.32	5.73	4.24	4.85	4.66	5.26	5.67
	4H	5.66	6.20	6.09	6.63	7.08	5.59	6.14	6.03	6.56	7.01
	6H	7.03	7.50	7.50	7.95	8.42	6.95	7.42	7.42	7.87	8.34
	8H	7.79	8.22	8.26	8.67	9.15	7.69	8.13	8.17	8.58	9.06
	12H	8.79	9.16	9.28	9.65	10.13	8.68	9.05	9.17	9.54	10.02
8H	4H	6.06	6.50	6.54	6.95	7.43	6.01	6.45	6.49	6.90	7.37
	6H	7.68	8.02	8.19	8.53	9.01	7.61	7.95	8.12	8.45	8.94
	8H	8.59	8.90	9.13	9.42	9.92	8.50	8.81	9.04	9.33	9.83
	12H	9.73	9.99	10.26	10.49	11.07	9.63	9.89	10.15	10.39	10.97
12H	4H	6.15	6.52	6.64	7.01	7.49	6.10	6.47	6.59	6.96	7.44
	6H	8.04	8.15	8.38	8.62	9.17	7.97	8.08	8.31	8.55	9.10
	8H	8.85	9.11	9.38	9.61	10.19	8.77	9.03	9.29	9.53	10.11

Variation with the observer position at spacings:		
S = 1.0H	5.3/-9.4	5.3/-9.4
S = 1.5H	7.9/-7.6	7.9/-7.6
S = 2.0H	9.6/-6.2	9.6/-6.2
Standard tables:	BK1	BK1
Uncorrected UGR	-1.7	-1.7

Budgetary Estimate Table

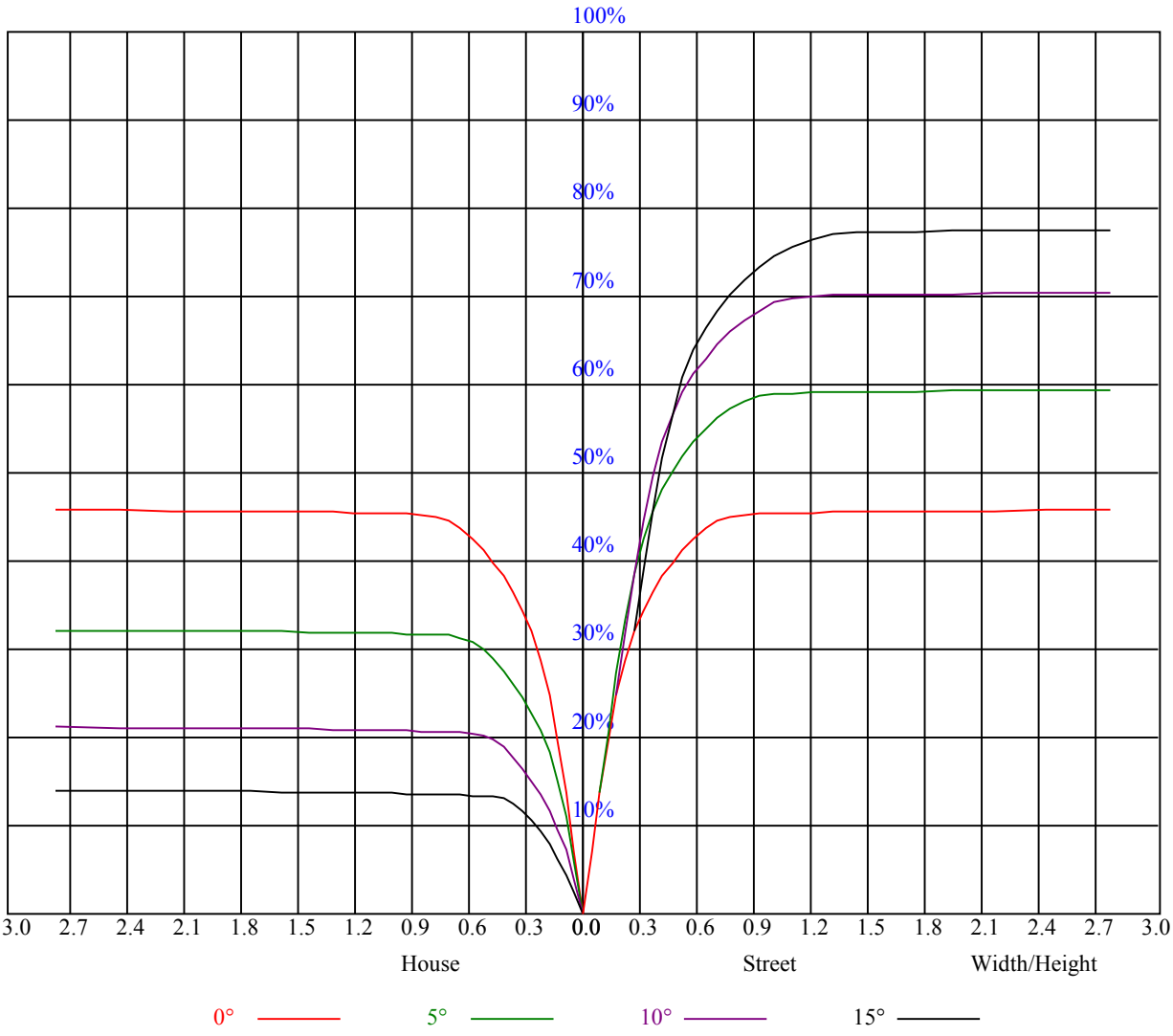


Equipment: GMS1980 Date: 2018/9/8 Operator: NT07
Temperature(°C): 25.0 Humidity(%): 60.0% Distance(m): 7.50

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	1.10	1.10	1.10	1.07	1.07	1.07	1.03	1.03	1.03	0.98	0.98	0.98	0.94	0.94	0.94	0.92
1	1.03	1.01	0.99	1.01	0.99	0.98	0.97	0.96	0.95	0.94	0.93	0.92	0.91	0.90	0.89	0.88
2	0.97	0.94	0.91	0.96	0.93	0.90	0.93	0.90	0.88	0.90	0.88	0.87	0.88	0.86	0.85	0.83
3	0.92	0.88	0.85	0.91	0.87	0.85	0.89	0.86	0.83	0.87	0.84	0.82	0.85	0.83	0.81	0.79
4	0.88	0.84	0.80	0.87	0.83	0.80	0.85	0.82	0.79	0.83	0.80	0.78	0.82	0.79	0.77	0.76
5	0.84	0.79	0.76	0.83	0.79	0.76	0.81	0.78	0.75	0.80	0.77	0.75	0.79	0.76	0.74	0.73
6	0.80	0.76	0.72	0.80	0.75	0.72	0.78	0.75	0.72	0.77	0.74	0.71	0.76	0.73	0.71	0.70
7	0.77	0.72	0.69	0.76	0.72	0.69	0.75	0.72	0.69	0.74	0.71	0.68	0.73	0.70	0.68	0.67
8	0.74	0.70	0.66	0.73	0.69	0.66	0.73	0.69	0.66	0.72	0.68	0.66	0.71	0.68	0.66	0.65
9	0.71	0.67	0.64	0.71	0.67	0.64	0.70	0.66	0.64	0.69	0.66	0.63	0.69	0.66	0.63	0.62
10	0.69	0.64	0.62	0.68	0.64	0.62	0.68	0.64	0.61	0.67	0.64	0.61	0.67	0.63	0.61	0.60

Coefficient Utilization Curve



Equipment: GMS1980
Temperature(°C): 25.0

Date: 2018/9/8
Humidity(%): 60.0%

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	6462.00	6476.63	6485.06	6450.19	6369.19	6214.50	5957.44	5657.06	5295.38
45.0	6472.13	6483.38	6478.88	6433.31	6323.63	6130.69	5869.13	5497.88	5124.38
90.0	6479.44	6472.13	6459.75	6383.25	6263.44	6063.19	5708.81	5355.56	4964.06
135.0	6481.13	6473.25	6446.81	6395.63	6315.19	6150.38	5884.88	5581.69	5216.06
180.0	6462.00	6426.56	6370.31	6298.31	6161.06	5981.63	5715.56	5295.38	4899.94
225.0	6472.13	6443.44	6413.63	6351.19	6273.56	6127.88	5848.88	5535.00	5166.00
270.0	6479.44	6464.25	6448.50	6413.06	6340.50	6231.38	6000.75	5690.81	5342.06
315.0	6481.13	6486.75	6463.69	6390.00	6274.69	6100.31	5841.00	5094.00	5043.38
360.0	6462.00	6476.63	6485.06	6450.19	6369.19	6214.50	5957.44	5657.06	5295.38

C/γ(°)	9.0	10.0	11.0	12.0	13.0	14.0	15.0	16.0	17.0
0.0	4798.13	4372.31	3932.44	3372.19	2926.69	2516.06	2099.81	1753.88	1497.38
45.0	4664.25	4172.63	3727.13	3273.75	2726.44	2329.31	1976.06	1611.00	1377.00
90.0	4489.31	3999.94	3556.69	3115.13	2590.31	2206.69	1869.19	1552.50	1302.75
135.0	4720.50	4291.31	3853.13	3456.56	2861.44	2455.88	2142.00	1722.38	1478.25
180.0	4475.81	3942.00	3498.19	3058.31	2589.75	2172.38	1849.50	1550.25	1337.63
225.0	4655.81	4231.69	3794.63	3241.69	2869.88	2418.19	1995.19	1737.00	1486.69
270.0	4896.56	4416.75	3982.50	3593.81	2993.63	2579.63	2206.69	1848.38	1549.13
315.0	4623.19	4085.44	3641.06	3195.56	2704.50	2267.44	1937.25	1620.00	1389.94
360.0	4798.13	4372.31	3932.44	3372.19	2926.69	2516.06	2099.81	1753.88	1497.38

C/γ(°)	18.0	19.0	20.0	21.0	22.0	23.0	24.0	25.0	26.0
0.0	1271.25	1114.31	989.44	910.69	851.06	808.31	775.13	750.94	732.94
45.0	1188.56	1035.56	929.25	868.50	817.31	783.56	758.81	737.44	721.13
90.0	1113.75	993.09	910.52	850.16	807.75	776.03	751.11	733.67	718.37
135.0	1298.81	1105.31	979.88	910.69	843.19	809.44	779.06	753.75	737.44
180.0	1116.00	998.89	924.36	857.87	807.75	778.84	755.44	728.44	715.50
225.0	1115.94	1098.96	988.65	900.62	845.33	805.44	773.94	743.74	724.95
270.0	1337.63	1155.94	1019.81	936.00	866.81	825.75	789.75	759.94	740.25
315.0	1113.08	1035.00	941.51	868.11	816.86	784.63	755.94	733.89	716.06
360.0	1271.25	1114.31	989.44	910.69	851.06	808.31	775.13	750.94	732.94

C/γ(°)	27.0	28.0	29.0	30.0	31.0	32.0	33.0	34.0	35.0
0.0	713.25	699.75	687.94	672.75	660.94	648.56	638.44	622.69	585.00
45.0	705.94	693.56	678.94	669.38	656.44	647.44	634.50	596.81	533.81
90.0	705.38	690.30	677.42	666.51	653.51	642.43	629.61	584.72	510.53
135.0	720.56	707.06	690.75	677.25	664.31	653.63	641.81	622.69	575.44
180.0	700.76	688.56	672.98	660.54	650.87	639.45	628.48	605.81	554.57
225.0	710.21	694.58	677.98	664.31	654.36	642.21	632.70	617.34	577.35
270.0	725.06	705.94	689.06	676.13	661.50	651.38	640.69	624.94	584.44
315.0	701.16	687.54	672.53	660.49	649.97	638.44	626.74	610.43	560.53
360.0	713.25	699.75	687.94	672.75	660.94	648.56	638.44	622.69	585.00

C/γ(°)	36.0	37.0	38.0	39.0	40.0	41.0	42.0	43.0	44.0
0.0	518.06	421.31	312.19	286.31	119.64	60.86	29.53	21.99	16.26
45.0	448.31	354.38	286.31	162.17	79.93	35.72	24.36	17.44	13.61
90.0	428.51	324.90	234.17	140.34	65.48	29.25	23.57	15.92	12.60
135.0	500.06	402.19	298.13	286.31	110.31	49.28	26.10	21.09	15.30
180.0	468.68	379.29	272.64	180.79	94.33	40.61	25.88	17.27	13.11
225.0	497.25	401.74	314.78	214.31	122.18	60.98	31.16	20.87	15.47
270.0	519.75	425.25	330.75	294.19	131.46	68.51	30.83	22.73	16.59
315.0	472.78	371.36	279.73	178.03	93.32	42.58	26.16	19.07	13.78
360.0	518.06	421.31	312.19	286.31	119.64	60.86	29.53	21.99	16.26

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	12.94	11.98	11.08	10.80	10.52	10.29	10.13	9.90	9.73
45.0	11.98	11.31	11.03	10.86	10.58	10.41	10.18	10.01	9.84
90.0	11.70	11.31	11.03	10.80	10.58	10.35	10.18	10.01	9.84
135.0	13.33	12.71	11.25	10.97	10.74	10.52	10.29	10.13	9.96
180.0	11.76	11.31	11.03	10.74	10.58	10.29	10.13	9.90	9.73
225.0	12.94	11.70	11.31	11.03	10.74	10.46	10.24	10.01	9.84
270.0	13.44	12.43	11.36	11.08	10.86	10.52	10.29	10.07	9.90
315.0	11.81	11.31	11.03	10.80	10.52	10.29	10.07	9.90	9.73
360.0	12.94	11.98	11.08	10.80	10.52	10.29	10.13	9.90	9.73

C/γ(°)	54.0	55.0	56.0	57.0	58.0	59.0	60.0	61.0	62.0
0.0	9.56	9.39	9.28	9.17	9.00	8.89	8.78	8.66	8.55
45.0	9.73	9.56	9.34	9.23	9.11	9.00	8.89	8.78	8.72
90.0	9.68	9.51	9.39	9.28	9.17	9.06	8.94	8.83	8.72
135.0	9.79	9.62	9.45	9.34	9.17	9.06	8.94	8.89	8.78
180.0	9.62	9.45	9.28	9.17	9.00	8.89	8.78	8.66	8.55
225.0	9.68	9.51	9.39	9.23	9.06	8.94	8.83	8.72	8.61
270.0	9.73	9.62	9.45	9.28	9.17	9.00	8.89	8.78	8.72
315.0	9.56	9.39	9.28	9.11	8.94	8.89	8.78	8.66	8.55
360.0	9.56	9.39	9.28	9.17	9.00	8.89	8.78	8.66	8.55

C/γ(°)	63.0	64.0	65.0	66.0	67.0	68.0	69.0	70.0	71.0
0.0	8.49	8.44	8.38	8.27	8.27	8.16	8.10	8.04	7.99
45.0	8.61	8.55	8.49	8.38	8.27	8.21	8.16	8.16	8.10
90.0	8.61	8.55	8.49	8.44	8.38	8.27	8.27	8.21	8.16
135.0	8.66	8.55	8.49	8.38	8.33	8.27	8.21	8.16	8.10
180.0	8.49	8.44	8.33	8.27	8.21	8.16	8.10	8.04	7.99
225.0	8.55	8.44	8.38	8.27	8.27	8.21	8.10	8.04	8.04
270.0	8.61	8.49	8.44	8.38	8.33	8.27	8.21	8.16	8.10
315.0	8.49	8.38	8.33	8.27	8.21	8.16	8.10	8.04	7.99
360.0	8.49	8.44	8.38	8.27	8.27	8.16	8.10	8.04	7.99

C/γ(°)	72.0	73.0	74.0	75.0	76.0	77.0	78.0	79.0	80.0
0.0	7.99	7.93	7.93	7.88	7.82	7.82	7.82	7.76	7.76
45.0	8.04	8.04	7.99	7.93	7.93	7.88	7.88	7.88	7.82
90.0	8.16	8.10	8.04	8.04	7.99	7.99	7.99	7.93	7.93
135.0	8.04	8.04	7.99	7.93	7.93	7.88	7.88	7.82	7.82
180.0	7.99	7.93	7.93	7.88	7.82	7.88	7.82	7.76	7.76
225.0	7.99	7.93	7.93	7.93	7.88	7.88	7.82	7.82	7.82
270.0	8.04	8.04	7.99	7.99	7.99	7.99	7.93	7.93	7.93
315.0	7.93	7.93	7.88	7.82	7.82	7.82	7.82	7.82	7.76
360.0	7.99	7.93	7.93	7.88	7.82	7.82	7.82	7.76	7.76

C/γ(°)	81.0	82.0	83.0	84.0	85.0	86.0	87.0	88.0	89.0
0.0	7.76	7.76	7.71	7.71	7.71	7.65	7.71	7.65	7.65
45.0	7.82	7.82	7.76	7.76	7.76	7.71	7.71	7.71	7.71
90.0	7.93	7.93	7.99	7.93	7.82	7.71	7.65	7.65	7.65
135.0	7.82	7.76	7.71	7.71	7.71	7.71	7.71	7.65	7.65
180.0	7.76	7.71	7.71	7.71	7.71	7.65	7.65	7.65	7.65
225.0	7.82	7.82	7.76	7.82	7.76	7.71	7.71	7.65	7.65
270.0	7.93	7.93	7.99	8.04	8.04	7.99	7.71	7.71	7.71
315.0	7.76	7.76	7.76	7.71	7.71	7.71	7.65	7.65	7.65
360.0	7.76	7.76	7.71	7.71	7.71	7.65	7.71	7.65	7.65

Intensity data(cd)

C/γ(°)	90.0
0.0	7.65
45.0	7.71
90.0	7.65
135.0	7.65
180.0	7.65
225.0	7.65
270.0	7.71
315.0	7.71
360.0	7.65