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: 4-2221-A
Luminaire: BJB47.319.2021
Report No: nata-0100
Test No: GC2018062601
LampCAT: Bridgelux V13B
Lamp flux(lm): 2495.0
Number of Lamps: 1
Length(mm): 100
Phm Type: C

Voltage(V): 34.0000
Current(A): 0.5000
Power (W): 17.0000
PF: 0.0000
Ballast type: DC
Width(mm): 100
Height(mm): 0

Photometric Results

Lumens(lm): 2251.42
Efficiency(%): 90.24%
Lumens(lm)/Power(W): 132.44
Central intensity(cd): 6261.888
Maximum intensity(cd): 6261.888
Angle of maximum intensity: C=0.0 γ=0.0
Beam Angle(50%Imax): [C0/180]Total=31.9
[C90/270]Total=31.9
Field angle(10%Imax): [C0/180]Total=65.3
[C90/270]Total=65.3
Maximum s/h(1/2): C0_180=0.53 C90_270=0.53
Maximum s/h(1/4): C0_180=0.52 C90_270=0.52
Up flux rate of lamp(%): 0.00%
Down flux rate of lamp(%): 90.24%
Up flux rate of LUM(%): - -
Down flux rate of LUM(%): 100.00%
CIE Type : Direct lighting
Output flux ratio in π solid angle : 99.797%

Zonal flux distribution table

γ(°)	Average I(cd)	Zonal F(lm)	Sum F(lm)	Eff Flux(%)	Eff Sum(%)
0.0	6261.888	0.000	0	.000%	.000%
1.0	6248.373	5.986	5.986	.240%	.266%
2.0	6202.027	17.870	23.856	.716%	1.060%
3.0	6122.446	29.476	53.332	1.181%	2.369%
4.0	6010.788	40.614	93.946	1.628%	4.173%
5.0	5867.517	51.100	145.046	2.048%	6.442%
6.0	5698.029	60.780	205.826	2.436%	9.142%
7.0	5508.065	69.556	275.382	2.788%	12.231%
8.0	5291.478	77.290	352.672	3.098%	15.664%
9.0	5057.779	83.875	436.547	3.362%	19.390%
10.0	4808.361	89.285	525.832	3.579%	23.356%
11.0	4561.263	93.622	619.454	3.752%	27.514%
12.0	4290.036	96.757	716.211	3.878%	31.812%
13.0	4003.843	98.427	814.639	3.945%	36.183%
14.0	3707.906	98.710	913.348	3.956%	40.568%
15.0	3422.177	97.885	1011.233	3.923%	44.915%
16.0	3109.592	95.709	1106.942	3.836%	49.166%
17.0	2805.361	92.112	1199.054	3.692%	53.258%
18.0	2521.430	87.827	1286.881	3.520%	57.159%
19.0	2255.249	83.104	1369.985	3.331%	60.850%
20.0	1964.300	77.229	1447.215	3.095%	64.280%
21.0	1739.012	71.111	1518.326	2.850%	67.439%
22.0	1533.805	65.769	1584.095	2.636%	70.360%
23.0	1319.102	59.862	1643.956	2.399%	73.019%
24.0	1208.360	55.259	1699.216	2.215%	75.473%
25.0	1084.075	52.125	1751.341	2.089%	77.788%
26.0	990.050	48.960	1800.301	1.962%	79.963%
27.0	908.369	46.445	1846.746	1.862%	82.026%
28.0	862.284	44.829	1891.575	1.797%	84.017%
29.0	825.254	44.151	1935.726	1.770%	85.978%
30.0	784.657	43.467	1979.193	1.742%	87.909%
31.0	734.217	42.268	2021.461	1.694%	89.786%
32.0	678.637	40.477	2061.938	1.622%	91.584%
33.0	600.274	37.677	2099.615	1.510%	93.258%
34.0	521.266	33.941	2133.556	1.360%	94.765%
35.0	439.335	29.833	2163.389	1.196%	96.090%
36.0	355.664	25.313	2188.702	1.015%	97.214%
37.0	258.989	20.047	2208.748	.803%	98.105%

Zonal flux distribution table

γ(°)	Average I(cd)	Zonal F(lm)	Sum F(lm)	Eff Flux(%)	Eff Sum(%)
38.0	151.727	13.709	2222.457	.549%	98.714%
39.0	110.788	8.960	2231.418	.359%	99.112%
40.0	61.832	6.020	2237.438	.241%	99.379%
41.0	39.014	3.591	2241.029	.144%	99.539%
42.0	8.637	1.731	2242.76	.069%	99.616%
43.0	5.870	0.537	2243.298	.022%	99.639%
44.0	4.530	0.393	2243.69	.016%	99.657%
45.0	3.573	0.311	2244.002	.012%	99.671%
46.0	3.039	0.259	2244.26	.010%	99.682%
47.0	2.703	0.228	2244.489	.009%	99.692%
48.0	2.564	0.213	2244.702	.009%	99.702%
49.0	2.436	0.205	2244.907	.008%	99.711%
50.0	2.349	0.200	2245.107	.008%	99.720%
51.0	2.245	0.194	2245.301	.008%	99.728%
52.0	2.146	0.188	2245.489	.008%	99.737%
53.0	2.048	0.182	2245.672	.007%	99.745%
54.0	1.995	0.178	2245.85	.007%	99.753%
55.0	1.937	0.176	2246.025	.007%	99.761%
56.0	1.885	0.173	2246.198	.007%	99.768%
57.0	1.845	0.171	2246.369	.007%	99.776%
58.0	1.740	0.166	2246.535	.007%	99.783%
59.0	1.694	0.161	2246.695	.006%	99.790%
60.0	1.676	0.159	2246.854	.006%	99.797%
61.0	1.647	0.159	2247.013	.006%	99.804%
62.0	1.595	0.156	2247.169	.006%	99.811%
63.0	1.555	0.153	2247.322	.006%	99.818%
64.0	1.520	0.151	2247.473	.006%	99.825%
65.0	1.497	0.149	2247.622	.006%	99.831%
66.0	1.485	0.149	2247.771	.006%	99.838%
67.0	1.456	0.148	2247.919	.006%	99.845%
68.0	1.410	0.145	2248.064	.006%	99.851%
69.0	1.392	0.143	2248.207	.006%	99.857%
70.0	1.404	0.144	2248.351	.006%	99.864%
71.0	1.410	0.145	2248.496	.006%	99.870%
72.0	1.386	0.145	2248.641	.006%	99.877%
73.0	1.357	0.143	2248.785	.006%	99.883%
74.0	1.357	0.143	2248.928	.006%	99.889%
75.0	1.369	0.144	2249.072	.006%	99.896%

Zonal flux distribution table

γ(°)	Average I(cd)	Zonal F(lm)	Sum F(lm)	Eff Flux(%)	Eff Sum(%)
76.0	1.375	0.146	2249.217	.006%	99.902%
77.0	1.351	0.145	2249.363	.006%	99.909%
78.0	1.351	0.145	2249.507	.006%	99.915%
79.0	1.369	0.146	2249.654	.006%	99.922%
80.0	1.398	0.149	2249.803	.006%	99.928%
81.0	1.380	0.150	2249.953	.006%	99.935%
82.0	1.380	0.150	2250.103	.006%	99.942%
83.0	1.433	0.153	2250.256	.006%	99.948%
84.0	1.456	0.157	2250.413	.006%	99.955%
85.0	1.497	0.161	2250.574	.006%	99.963%
86.0	1.584	0.168	2250.742	.007%	99.970%
87.0	1.601	0.174	2250.917	.007%	99.978%
88.0	1.508	0.170	2251.087	.007%	99.985%
89.0	1.497	0.165	2251.252	.007%	99.993%
90.0	1.502	0.164	2251.416	.007%	100.000%

Zonal flux distribution table

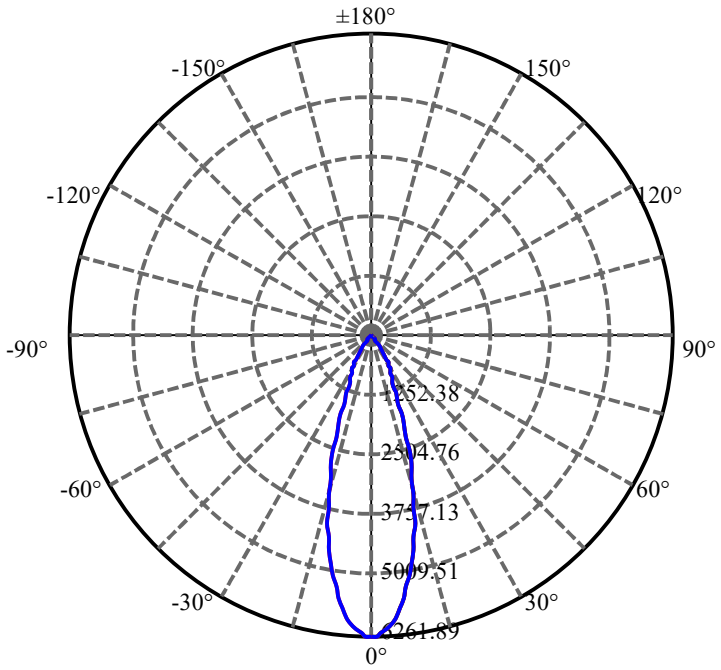
ZONAL LUMEN SUMMARY

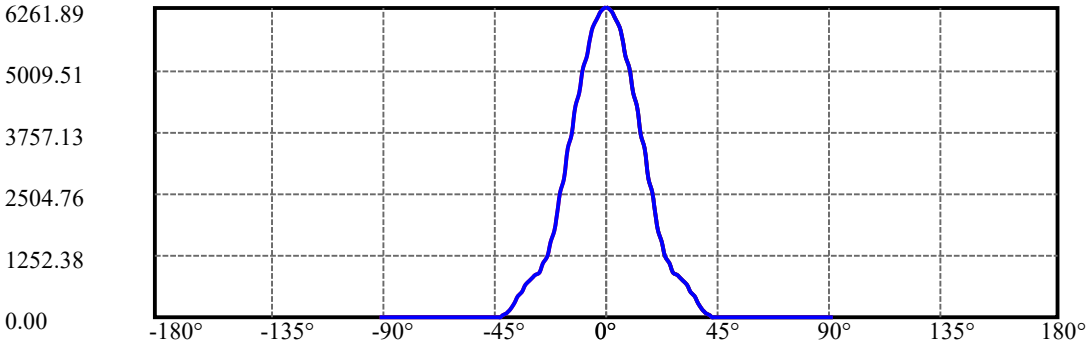
Zone	Lumens	%Lamp	%Fixt
0-30	1979.19	79.33%	87.91%
0-40	2237.44	89.68%	99.38%
0-60	2246.85	90.05%	99.80%
0-90	2251.25	90.23%	99.99%
0-120	2251.25	90.23%	99.99%
0-180	2251.42	90.24%	100.00%
60-90	4.56	0.18%	0.20%
90-120	0.00	0.00%	0.00%
90-130	0.00	0.00%	0.00%
90-150	0.00	0.00%	0.00%
90-180	0.00	0.00%	0.00%
0-26.02	1801.13	72.19%	80.00%

ZONAL LUMEN SUMMARY

0-10	525.83
10-20	921.38
20-30	531.98
30-40	258.25
40-50	7.67
50-60	1.75
60-70	1.50
70-80	1.45
80-90	1.45
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):

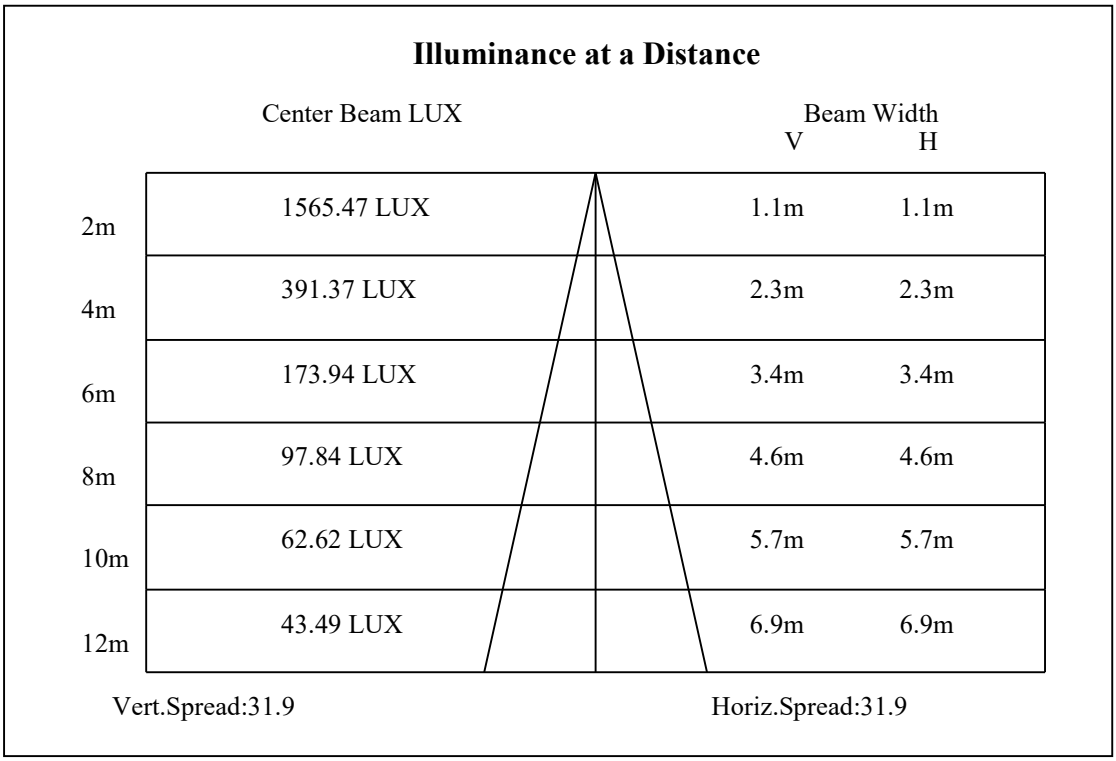
C0/C180:

C90/C270:

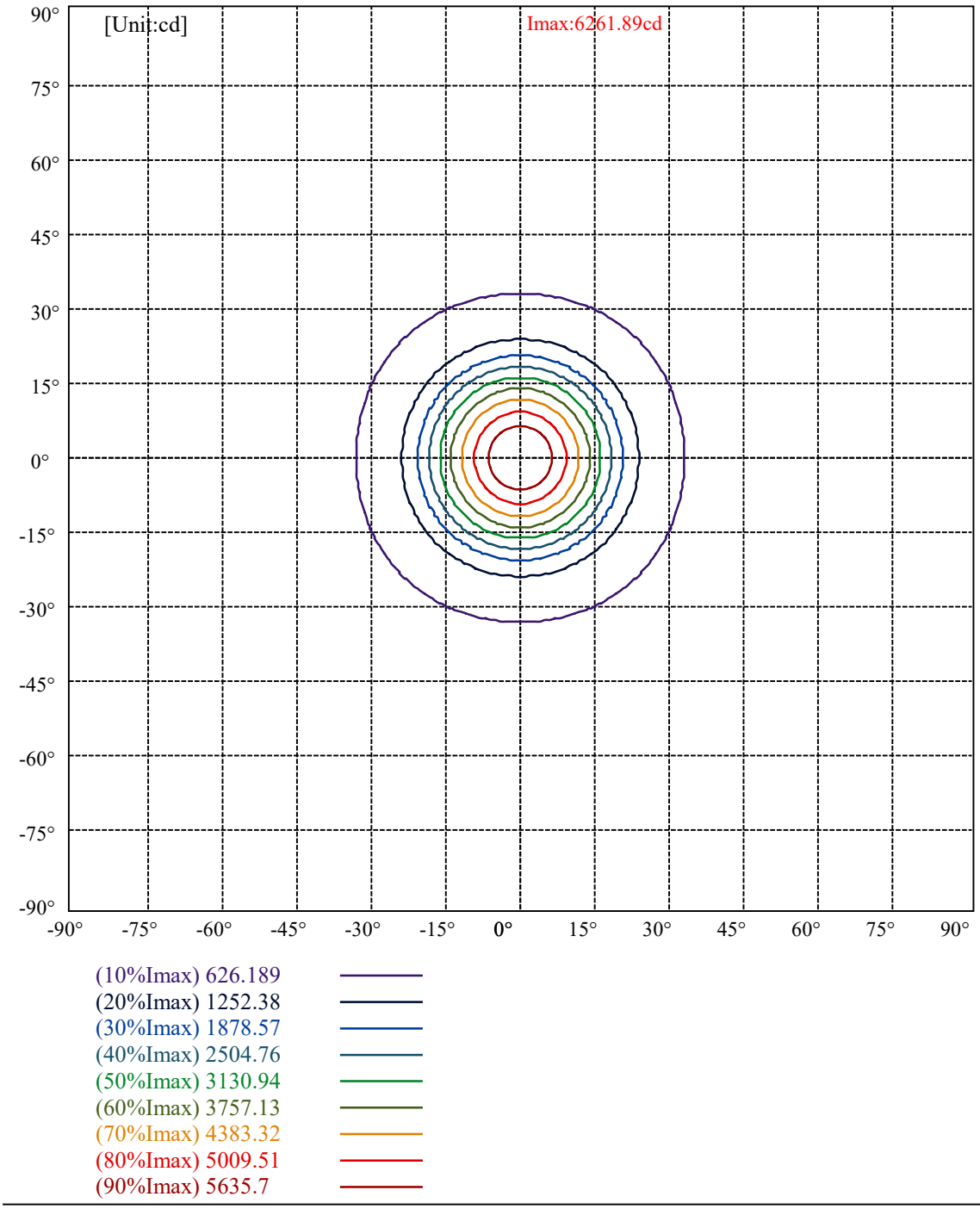
Field angle(10%Imax):C0/180Left:32.7 Right:32.7
:C90/270Left:32.7 Right:32.7

Beam Angle(50%Imax):C0/180Left:15.9 Right:15.9
:C90/270Left:15.9 Right:15.9

Lux distance Curve



ISO-Intensity(V-H)

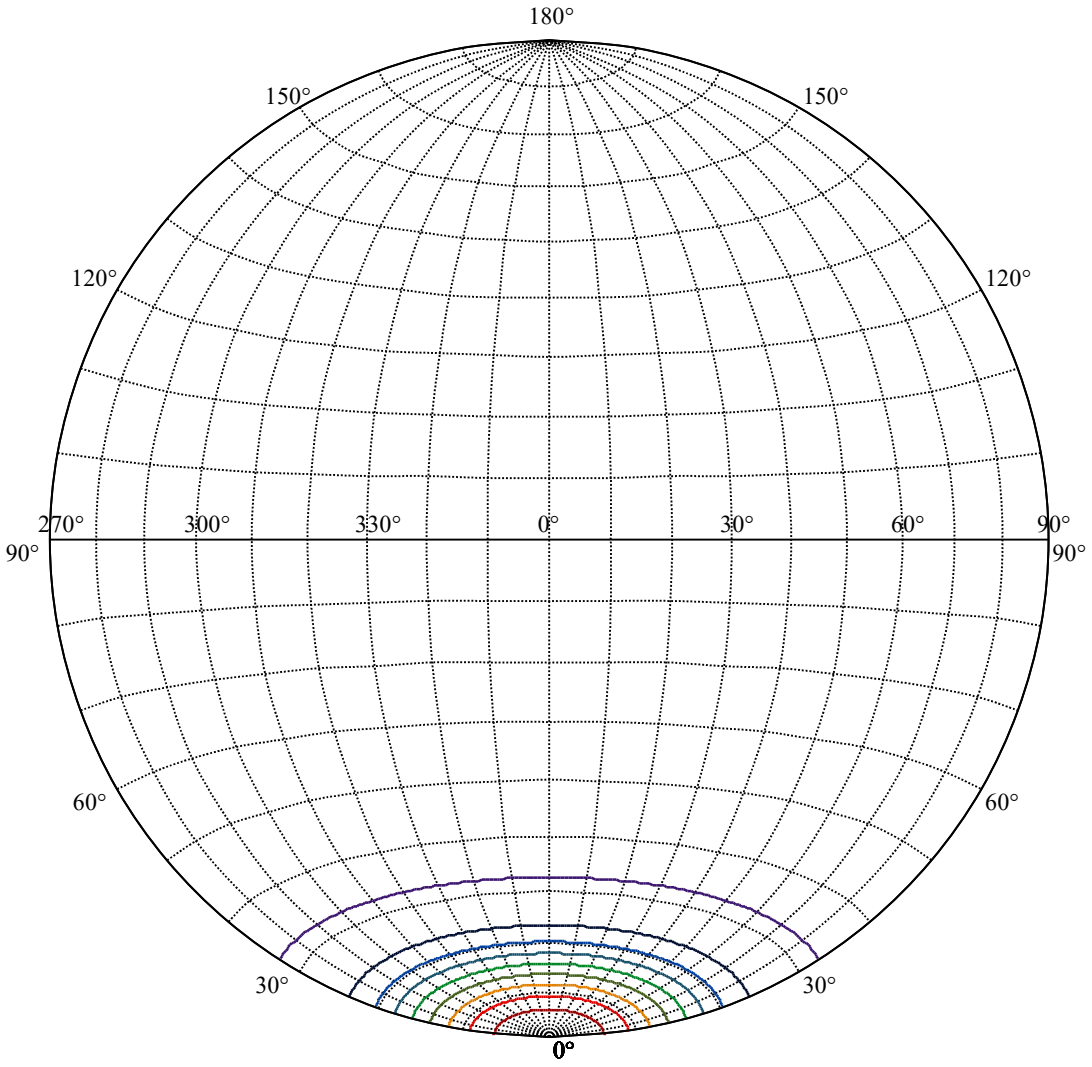


Equipment: GMS 1800
Temperature(°C): 25.0

Date: 2018/6/26
Humidity(%): 60.0%

Operator: NT07
Distance(m): 6.81

ISO candela diagram on circular web



House [Unit:cd] Road

Imax:6261.89

(10%Imax) 626.189
(20%Imax) 1252.38
(30%Imax) 1878.57
(40%Imax) 2504.76
(50%Imax) 3130.94
(60%Imax) 3757.13
(70%Imax) 4383.32
(80%Imax) 5009.51
(90%Imax) 5635.7

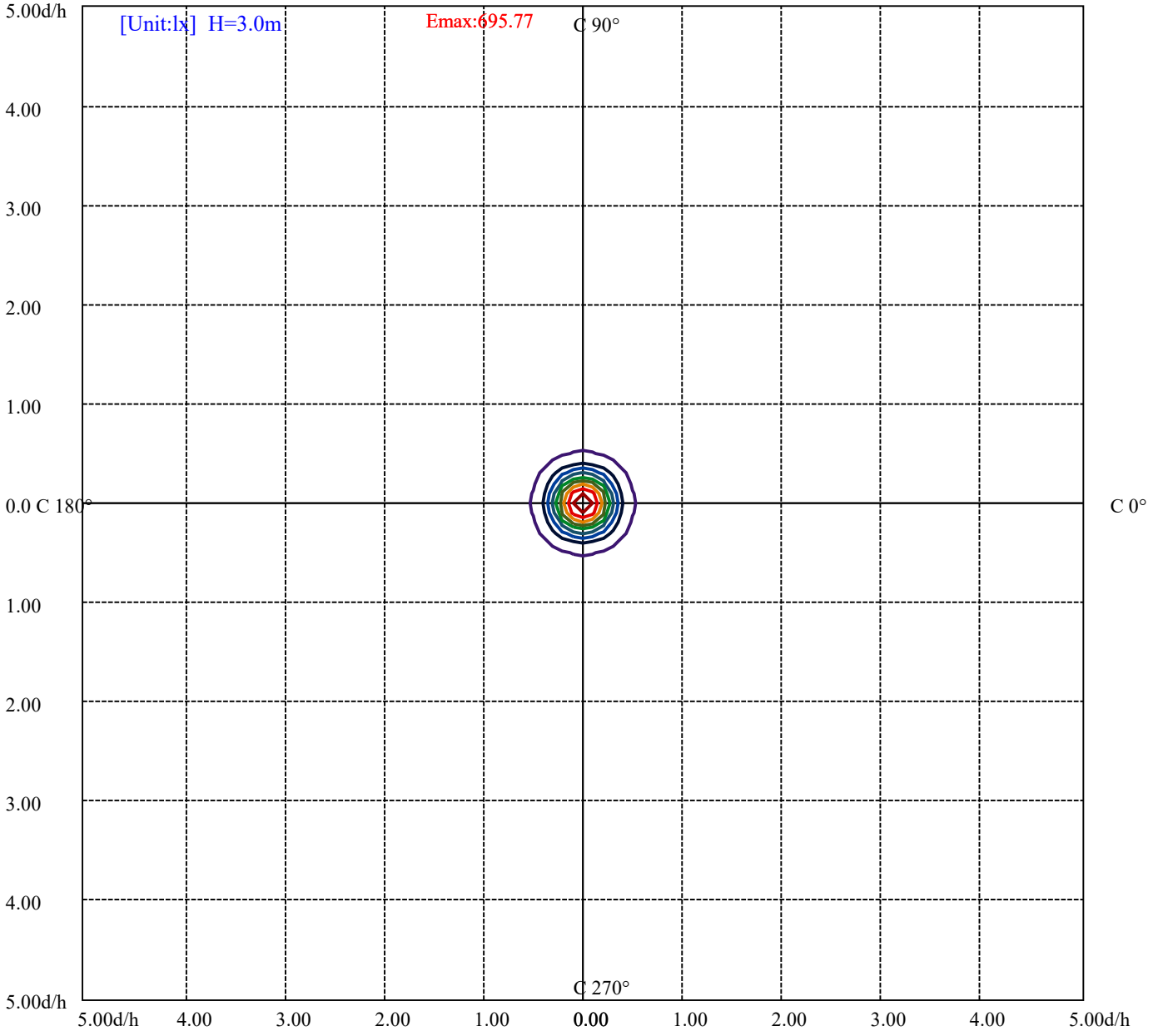
Equipment: GMS 1800
Temperature(°C): 25.0

Date: 2018/6/26
Humidity(%): 60.0%

Operator: NT07
Distance(m): 6.81

Nata 4-2221-A

ISO illuminance diagram

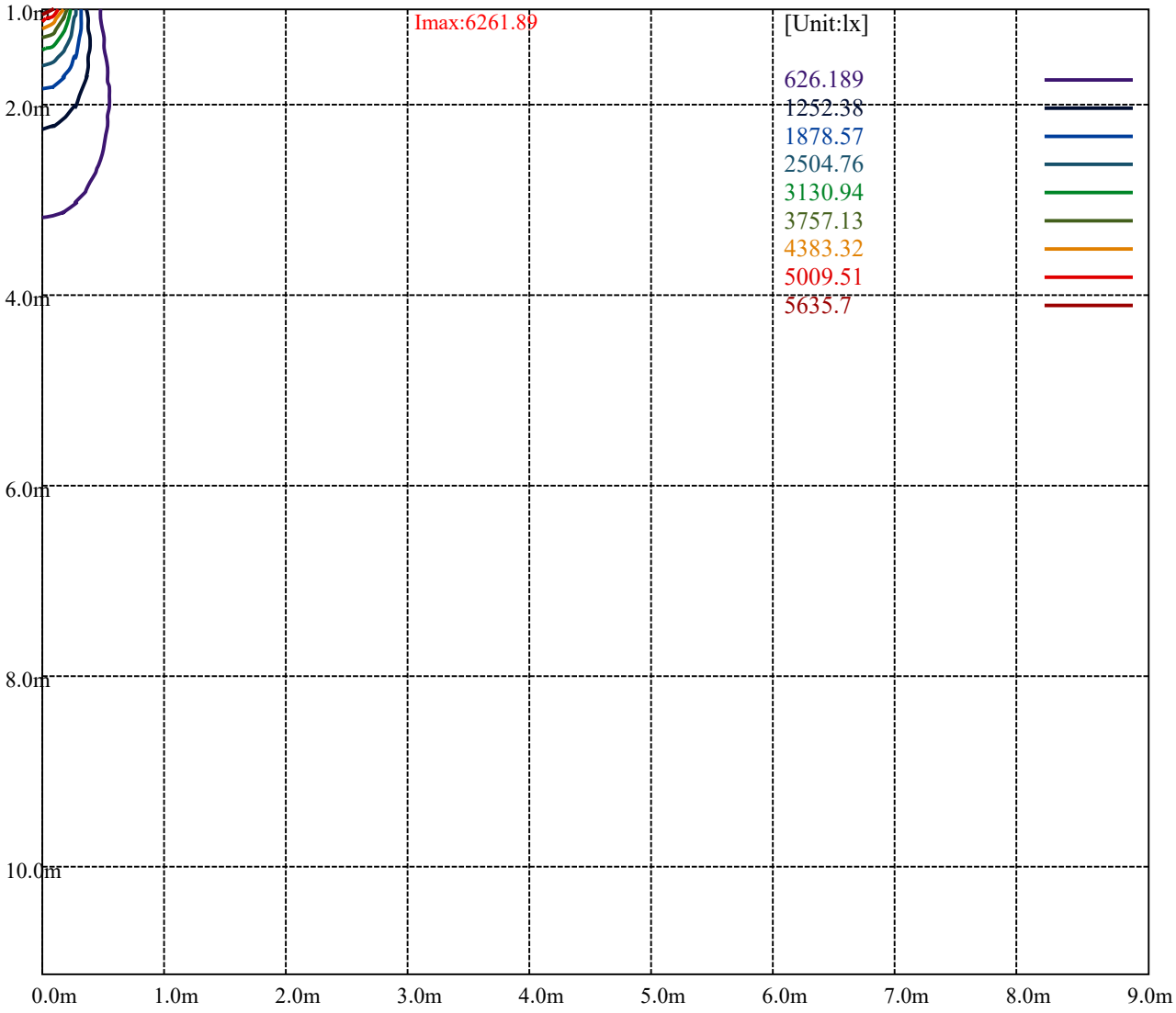


Equipment: GMS 1800
Temperature(°C): 25.0

Date: 2018/6/26
Humidity(%): 60.0%

Operator: NT07
Distance(m): 6.81

Space ISO Lux diagram



Equipment: GMS 1800
Temperature(°C): 25.0

Date: 2018/6/26
Humidity(%): 60.0%

Operator: NT07
Distance(m): 6.81

Luminance Limitting Curve(no luminous side)

Luminance Table

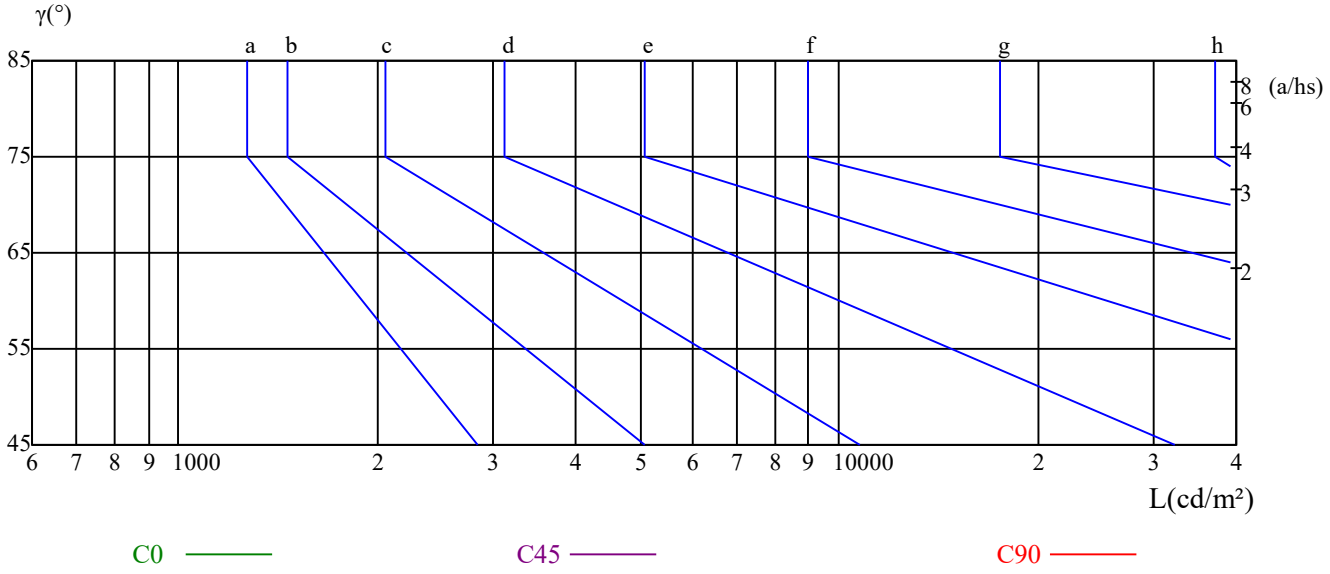
γ	45	50	55	60	65	70	75	80	85
C0	306	206	175	158	148	147	154	172	204
C45	263	174	146	129	119	116	119	130	149
C90	306	206	175	158	148	147	154	172	204

L(Hor)(65)	L(Ver)(65)	L45(65)	L(Hor)(75)	L(Ver)(75)	L45(75)	L(Hor)(85)	L(Ver)(85)	L45(85)
354	354	354	529	529	529	1717	1717	1717

Glare Table

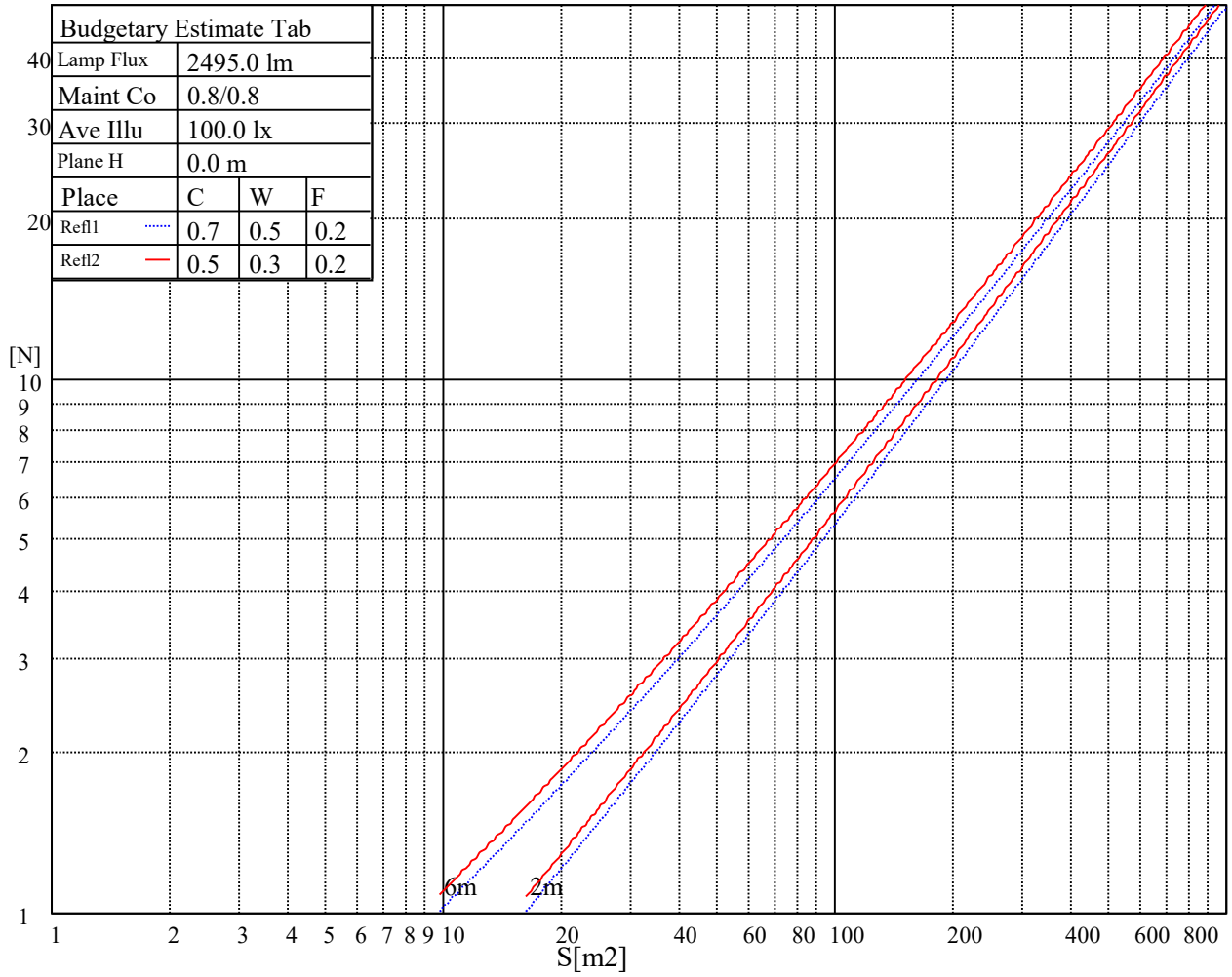
Glare	Quality	Service Values Illuminance(lx)							
1.15	A	2000	1000	500	<=300				
1.5	B		2000	1000	500	<=300			
1.85	C			2000	1000	500	<=300		
2.2	D				2000	1000	500	<=300	
2.55	E					2000	1000	500	<=300
		a	b	c	d	e	f	g	h

Luminance Limitting Curve



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	-14.10	-13.22	-13.73	-12.90	-12.59	-14.11	-13.23	-13.74	-12.92	-12.60
	3H	-12.42	-11.65	-12.04	-11.32	-10.95	-12.39	-11.62	-12.01	-11.28	-10.91
	4H	-11.39	-10.67	-10.98	-10.32	-9.93	-11.39	-10.67	-10.98	-10.32	-9.93
	6H	-10.19	-9.54	-9.77	-9.16	-8.76	-10.19	-9.54	-9.77	-9.16	-8.76
	8H	-9.50	-8.89	-9.06	-8.50	-8.09	-9.56	-8.96	-9.13	-8.56	-8.15
	12H	-8.35	-7.76	-7.91	-7.38	-6.95	-8.60	-8.02	-8.17	-7.64	-7.21
4H	2H	-13.79	-13.08	-13.38	-12.72	-12.33	-13.80	-13.09	-13.39	-12.73	-12.34
	3H	-11.82	-11.24	-11.40	-10.82	-10.42	-11.79	-11.21	-11.37	-10.80	-10.39
	4H	-10.59	-10.07	-10.15	-9.64	-9.19	-10.59	-10.07	-10.15	-9.64	-9.19
	6H	-9.18	-8.74	-8.71	-8.29	-7.81	-9.17	-8.73	-8.70	-8.28	-7.80
	8H	-8.37	-7.96	-7.89	-7.50	-7.03	-8.44	-8.02	-7.96	-7.57	-7.09
	12H	-7.20	-6.85	-6.71	-6.36	-5.88	-7.47	-7.12	-6.97	-6.63	-6.15
8H	4H	-10.21	-9.80	-9.73	-9.35	-8.87	-10.21	-9.80	-9.73	-9.35	-8.87
	6H	-8.57	-8.25	-8.06	-7.75	-7.26	-8.55	-8.23	-8.04	-7.73	-7.24
	8H	-7.58	-7.30	-7.05	-6.78	-6.28	-7.65	-7.36	-7.11	-6.84	-6.34
	12H	-6.27	-6.03	-5.74	-5.53	-4.95	-6.53	-6.28	-6.00	-5.78	-5.20
12H	4H	-10.13	-9.78	-9.63	-9.28	-8.81	-10.13	-9.78	-9.64	-9.29	-8.81
	6H	-8.25	-8.12	-7.86	-7.64	-7.09	-8.23	-8.10	-7.85	-7.63	-7.08
	8H	-7.31	-7.07	-6.79	-6.57	-5.99	-7.37	-7.13	-6.85	-6.63	-6.05
Variation with the observer position at spacings:											
S = 1.0H		6.2/-20.3					6.2/-20.3				
S = 1.5H		9.0/-18.3					9.0/-18.3				
S = 2.0H		11.0/-16.9					11.0/-16.9				
Standard tables:		BK0					BK0				
Uncorrected UGR		-6.5					-6.5				

Budgetary Estimate Table

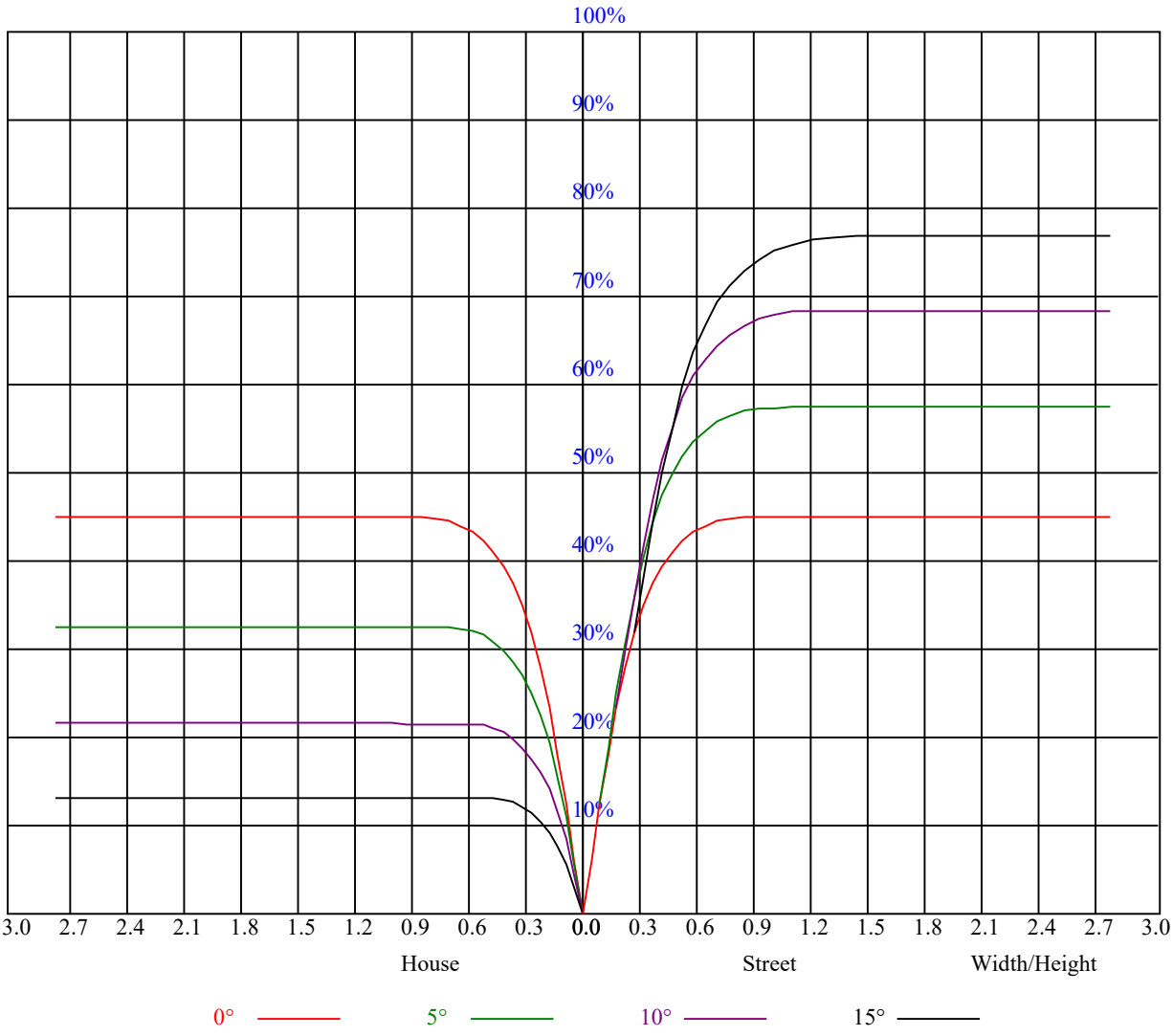


Equipment: GMS 1800 Date: 2018/6/26 Operator: NT07
Temperature(°C): 25.0 Humidity(%): 60.0% Distance(m): 6.81

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	1.05	1.05	1.05	1.00	1.00	1.00	0.96	0.96	0.96	0.92	0.92	0.92	0.90
1	1.01	0.99	0.98	0.99	0.98	0.96	0.96	0.94	0.93	0.92	0.91	0.90	0.89	0.88	0.88	0.86
2	0.96	0.93	0.90	0.94	0.91	0.89	0.91	0.89	0.87	0.89	0.87	0.85	0.86	0.85	0.84	0.82
3	0.91	0.87	0.84	0.90	0.86	0.84	0.87	0.85	0.82	0.85	0.83	0.81	0.83	0.81	0.80	0.78
4	0.86	0.82	0.79	0.85	0.82	0.79	0.84	0.80	0.78	0.82	0.79	0.77	0.80	0.78	0.76	0.75
5	0.82	0.78	0.75	0.82	0.78	0.75	0.80	0.77	0.74	0.79	0.76	0.73	0.77	0.75	0.73	0.72
6	0.79	0.74	0.71	0.78	0.74	0.71	0.77	0.73	0.71	0.76	0.73	0.70	0.75	0.72	0.70	0.69
7	0.76	0.71	0.68	0.75	0.71	0.68	0.74	0.70	0.68	0.73	0.70	0.67	0.72	0.69	0.67	0.66
8	0.72	0.68	0.65	0.72	0.68	0.65	0.71	0.67	0.65	0.70	0.67	0.65	0.69	0.67	0.64	0.63
9	0.70	0.65	0.62	0.69	0.65	0.62	0.68	0.65	0.62	0.68	0.64	0.62	0.67	0.64	0.62	0.61
10	0.67	0.63	0.60	0.67	0.63	0.60	0.66	0.62	0.60	0.65	0.62	0.60	0.65	0.62	0.60	0.59

Coefficient Utilization Curve



Equipment: GMS 1800	Date: 2018/6/26	Operator: NT07
Temperature(°C): 25.0	Humidity(%): 60.0%	Distance(m): 6.81

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	6254.75	6202.32	6105.33	5963.80	5791.65	5601.86	5394.90	5169.38	4914.62
45.0	6279.81	6253.36	6175.87	6045.47	5869.61	5666.82	5447.33	5211.61	4957.78
90.0	6238.51	6151.27	6012.53	5831.55	5625.52	5409.28	5179.12	4920.66	4633.42
135.0	6283.99	6248.72	6187.00	6087.70	5946.17	5804.18	5556.85	5388.87	5169.84
180.0	6254.75	6265.89	6250.58	6208.81	6139.21	6025.98	5876.10	5701.16	5511.84
225.0	6290.48	6295.59	6282.13	6270.53	6237.12	6101.62	6015.31	5844.55	5658.93
270.0	6208.81	6271.92	6310.90	6324.82	6321.11	6312.29	6262.64	6157.31	6015.31
315.0	6283.99	6297.91	6291.88	6246.86	6155.91	6018.10	5851.97	5671.00	5470.07
360.0	6254.75	6202.32	6105.33	5963.80	5791.65	5601.86	5394.90	5169.38	4914.62

C/γ(°)	9.0	10.0	11.0	12.0	13.0	14.0	15.0	16.0	17.0
0.0	4638.52	4338.76	4039.92	3732.73	3413.48	3095.61	2770.79	2516.04	2202.35
45.0	4675.65	4368.46	4057.55	3749.90	3435.75	3112.78	2791.21	2473.34	2165.23
90.0	4331.80	4033.89	3742.01	3440.85	3126.70	2809.30	2494.23	2187.50	1896.09
135.0	4942.47	4689.57	4414.40	4136.90	3859.41	3572.18	3269.16	2958.26	2645.97
180.0	5311.84	5095.60	4959.17	4714.63	4443.63	4165.21	3888.18	3606.98	3315.57
225.0	5466.36	5263.11	5052.44	4825.07	4573.10	4303.49	4029.71	3742.94	3446.42
270.0	5845.94	5665.43	5471.00	5252.90	5007.90	4742.00	4460.80	4173.10	3877.97
315.0	5249.66	5012.07	4753.60	4467.30	4170.78	3862.66	3673.34	3218.58	2893.29
360.0	4638.52	4338.76	4039.92	3732.73	3413.48	3095.61	2770.79	2516.04	2202.35

C/γ(°)	18.0	19.0	20.0	21.0	22.0	23.0	24.0	25.0	26.0
0.0	1905.83	1641.80	1418.13	1241.34	1105.37	906.77	906.77	875.54	835.96
45.0	1873.35	1659.89	1389.36	1214.42	1107.69	1006.07	932.29	877.53	838.09
90.0	1632.98	1413.03	1237.16	1103.98	921.25	909.88	888.90	847.42	815.86
135.0	2338.77	2037.15	1755.48	1509.55	1311.40	1156.42	1040.87	955.49	915.58
180.0	3011.16	2701.65	2399.56	2105.37	1826.02	1576.37	1371.27	1207.46	1080.32
225.0	3137.38	2819.98	2505.83	2202.35	2027.87	1655.25	1517.44	1320.22	1162.45
270.0	3571.71	3383.31	2930.88	2739.70	2425.09	2000.96	1831.12	1575.44	1363.38
315.0	2700.26	2385.18	2077.99	1795.39	1545.74	1341.10	1178.23	1013.50	908.76
360.0	1905.83	1641.80	1418.13	1241.34	1105.37	906.77	906.77	875.54	835.96

C/γ(°)	27.0	28.0	29.0	30.0	31.0	32.0	33.0	34.0	35.0
0.0	806.12	781.80	761.11	750.76	678.18	615.49	443.11	366.26	236.01
45.0	809.32	785.66	765.24	745.75	676.61	564.31	438.56	307.24	281.25
90.0	790.16	768.39	744.26	664.36	548.91	419.35	288.03	166.77	68.72
135.0	865.47	818.60	802.36	777.77	757.81	719.76	632.06	511.41	380.09
180.0	983.33	911.41	878.00	824.63	807.00	781.48	759.67	738.32	665.01
225.0	922.27	922.27	874.01	830.57	799.90	775.35	754.38	730.20	651.78
270.0	1193.54	1062.68	964.77	893.31	842.73	806.07	778.69	755.03	734.61
315.0	896.74	847.46	812.29	790.11	762.59	747.28	707.70	594.89	497.21
360.0	806.12	781.80	761.11	750.76	678.18	615.49	443.11	366.26	236.01

C/γ(°)	36.0	37.0	38.0	39.0	40.0	41.0	42.0	43.0	44.0
0.0	120.37	36.61	12.85	10.12	7.56	5.52	3.71	2.92	2.78
45.0	281.25	33.41	10.39	8.72	6.45	4.83	3.85	2.97	2.74
90.0	16.38	11.28	8.21	6.50	4.55	3.06	2.97	2.83	2.78
135.0	300.74	300.74	46.87	13.41	10.21	7.84	5.34	4.18	3.11
180.0	555.49	429.28	298.42	298.42	54.15	14.06	10.95	8.40	5.89
225.0	539.53	464.31	281.58	206.12	94.89	14.34	11.18	8.49	6.31
270.0	665.47	560.13	434.38	303.99	303.99	252.48	23.85	12.11	9.00
315.0	366.08	236.15	121.11	39.03	12.85	9.98	7.24	5.06	3.62
360.0	120.37	36.61	12.85	10.12	7.56	5.52	3.71	2.92	2.78

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	2.69	2.64	2.51	2.37	2.23	2.23	2.13	2.04	1.95
45.0	2.60	2.55	2.46	2.32	2.18	2.18	2.13	2.00	1.90
90.0	2.55	2.41	2.27	2.27	2.18	2.09	1.95	1.90	1.90
135.0	2.92	2.83	2.74	2.55	2.41	2.32	2.32	2.18	2.04
180.0	3.94	2.92	2.74	2.69	2.60	2.37	2.32	2.27	2.23
225.0	4.69	3.67	2.83	2.69	2.55	2.37	2.32	2.27	2.13
270.0	6.26	4.41	3.29	3.02	2.92	2.92	2.55	2.37	2.23
315.0	2.92	2.88	2.78	2.60	2.41	2.32	2.23	2.13	2.00
360.0	2.69	2.64	2.51	2.37	2.23	2.23	2.13	2.04	1.95

C/γ(°)	54.0	55.0	56.0	57.0	58.0	59.0	60.0	61.0	62.0
0.0	1.90	1.86	1.81	1.76	1.62	1.62	1.67	1.58	1.53
45.0	1.86	1.90	1.81	1.72	1.67	1.67	1.62	1.62	1.58
90.0	1.86	1.72	1.72	1.72	1.67	1.58	1.53	1.58	1.58
135.0	2.00	2.00	1.95	1.86	1.72	1.72	1.76	1.67	1.58
180.0	2.09	1.95	1.95	1.95	1.81	1.72	1.72	1.72	1.62
225.0	2.00	1.95	1.95	1.86	1.72	1.72	1.67	1.62	1.58
270.0	2.23	2.18	2.04	2.04	1.90	1.86	1.81	1.76	1.67
315.0	2.04	1.95	1.86	1.86	1.81	1.67	1.62	1.62	1.62
360.0	1.90	1.86	1.81	1.76	1.62	1.62	1.67	1.58	1.53

C/γ(°)	63.0	64.0	65.0	66.0	67.0	68.0	69.0	70.0	71.0
0.0	1.48	1.53	1.48	1.44	1.39	1.39	1.35	1.39	1.44
45.0	1.48	1.48	1.48	1.48	1.39	1.39	1.44	1.44	1.35
90.0	1.53	1.44	1.39	1.39	1.44	1.39	1.35	1.35	1.39
135.0	1.58	1.58	1.48	1.48	1.48	1.39	1.39	1.44	1.44
180.0	1.58	1.53	1.58	1.53	1.48	1.48	1.44	1.35	1.44
225.0	1.62	1.53	1.48	1.48	1.53	1.44	1.35	1.39	1.44
270.0	1.62	1.58	1.62	1.58	1.48	1.44	1.48	1.48	1.39
315.0	1.53	1.48	1.44	1.48	1.44	1.35	1.35	1.39	1.39
360.0	1.48	1.53	1.48	1.44	1.39	1.39	1.35	1.39	1.44

C/γ(°)	72.0	73.0	74.0	75.0	76.0	77.0	78.0	79.0	80.0
0.0	1.39	1.35	1.35	1.39	1.44	1.35	1.39	1.39	1.44
45.0	1.35	1.39	1.44	1.35	1.35	1.39	1.44	1.39	1.44
90.0	1.44	1.30	1.35	1.39	1.39	1.35	1.35	1.44	1.48
135.0	1.39	1.35	1.39	1.39	1.39	1.35	1.35	1.39	1.39
180.0	1.44	1.39	1.30	1.35	1.39	1.39	1.30	1.35	1.39
225.0	1.39	1.35	1.30	1.35	1.39	1.30	1.30	1.35	1.39
270.0	1.35	1.35	1.39	1.39	1.30	1.35	1.35	1.35	1.30
315.0	1.35	1.39	1.35	1.35	1.35	1.35	1.35	1.30	1.35
360.0	1.39	1.35	1.35	1.39	1.44	1.35	1.39	1.39	1.44

C/γ(°)	81.0	82.0	83.0	84.0	85.0	86.0	87.0	88.0	89.0
0.0	1.39	1.35	1.44	1.48	1.39	1.48	1.58	1.44	1.44
45.0	1.39	1.48	1.48	1.58	1.81	2.09	2.13	1.53	1.48
90.0	1.53	1.58	1.76	1.86	1.86	2.04	1.81	1.53	1.48
135.0	1.35	1.35	1.39	1.39	1.53	1.72	1.86	1.95	1.72
180.0	1.39	1.35	1.39	1.35	1.35	1.35	1.44	1.35	1.48
225.0	1.35	1.25	1.35	1.39	1.35	1.35	1.35	1.39	1.39
270.0	1.30	1.35	1.30	1.30	1.35	1.30	1.30	1.35	1.44
315.0	1.35	1.35	1.35	1.30	1.35	1.35	1.35	1.53	1.53
360.0	1.39	1.35	1.44	1.48	1.39	1.48	1.58	1.44	1.44

Intensity data(cd)

C/γ(°)	90.0
0.0	1.44
45.0	1.53
90.0	1.48
135.0	1.53
180.0	1.62
225.0	1.44
270.0	1.44
315.0	1.53
360.0	1.44