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

NATA

LumCAT: 3-1646-E
Luminaire: 92.70.134.00
Report No: NATA0100
Test No: GC2019012204
LampCAT: CREE CXA2520
Lamp flux(lm): 2276.0
Number of Lamps: 1
Length(mm): 78
Phm Type: C

Voltage(V): 35.8600
Current(A): 0.7000
Power (W): 25.1000
PF: 0.0000
Ballast type: DC
Width(mm): 78
Height(mm): 0

Photometric Results

Lumens(lm): 1987.09
Efficiency(%): 87.31%
Lumens(lm)/Power(W): 79.28
Central intensity(cd): 12123.280
Maximum intensity(cd): 12123.280
Angle of maximum intensity: C=0.0 γ=0.0
Beam Angle(50%Imax): [C0/180]Total=17.5
[C90/270]Total=17.5
Field angle(10%Imax): [C0/180]Total=43.4
[C90/270]Total=43.4
Maximum s/h(1/2): C0_180=0.30 C90_270=0.30
Maximum s/h(1/4): C0_180=0.34 C90_270=0.34
Up flux rate of lamp(%): 0.00%
Down flux rate of lamp(%): 87.43%
Up flux rate of LUM(%): - -
Down flux rate of LUM(%): 100.00%
CIE Type : Direct lighting
Output flux ratio in π solid angle : 98.468%

Zonal flux distribution table

γ(°)	Average I(cd)	Zonal F(lm)	Sum F(lm)	Eff Flux(%)	Eff Sum(%)
0.0	12123.281	2.900	2.9	.127%	.146%
1.0	12056.484	23.074	25.975	1.014%	1.307%
2.0	11784.234	45.100	71.074	1.982%	3.577%
3.0	11310.398	64.913	135.987	2.852%	6.844%
4.0	10773.422	82.412	218.399	3.621%	10.991%
5.0	9893.180	94.555	312.954	4.154%	15.749%
6.0	8774.156	100.575	413.529	4.419%	20.811%
7.0	7687.688	102.741	516.27	4.514%	25.981%
8.0	6717.867	102.527	618.797	4.505%	31.141%
9.0	5816.883	99.787	718.584	4.384%	36.163%
10.0	5114.320	97.389	815.973	4.279%	41.064%
11.0	4545.422	95.110	911.082	4.179%	45.850%
12.0	4020.961	91.677	1002.759	4.028%	50.464%
13.0	3549.586	87.562	1090.322	3.847%	54.870%
14.0	3152.813	83.642	1173.964	3.675%	59.079%
15.0	2833.664	80.426	1254.39	3.534%	63.127%
16.0	2492.227	75.332	1329.722	3.310%	66.918%
17.0	2220.328	71.188	1400.909	3.128%	70.500%
18.0	1923.328	65.176	1466.085	2.864%	73.780%
19.0	1702.688	60.790	1526.875	2.671%	76.840%
20.0	1498.570	56.206	1583.08	2.469%	79.668%
21.0	1305.359	51.299	1634.38	2.254%	82.250%
22.0	1170.809	48.096	1682.476	2.113%	84.670%
23.0	1057.219	45.300	1727.776	1.990%	86.950%
24.0	925.706	41.289	1769.065	1.814%	89.028%
25.0	803.243	37.226	1806.291	1.636%	90.901%
26.0	676.259	32.509	1838.8	1.428%	92.537%
27.0	548.234	27.294	1866.094	1.199%	93.911%
28.0	430.327	22.154	1888.248	.973%	95.026%
29.0	324.288	17.241	1905.489	.757%	95.893%
30.0	229.922	12.607	1918.096	.554%	96.528%
31.0	157.563	8.899	1926.995	.391%	96.976%
32.0	80.002	4.649	1931.644	.204%	97.209%
33.0	43.601	2.604	1934.248	.114%	97.341%
34.0	24.919	1.528	1935.776	.067%	97.417%
35.0	19.048	1.198	1936.974	.053%	97.478%
36.0	16.685	1.075	1938.05	.047%	97.532%
37.0	15.279	1.008	1939.058	.044%	97.583%

Zonal flux distribution table

γ(°)	Average I(cd)	Zonal F(lm)	Sum F(lm)	Eff Flux(%)	Eff Sum(%)
38.0	14.442	0.975	1940.033	.043%	97.632%
39.0	13.788	0.952	1940.985	.042%	97.680%
40.0	13.240	0.933	1941.918	.041%	97.726%
41.0	12.769	0.919	1942.836	.040%	97.773%
42.0	12.347	0.906	1943.742	.040%	97.818%
43.0	11.974	0.896	1944.638	.039%	97.863%
44.0	11.637	0.886	1945.524	.039%	97.908%
45.0	11.355	0.881	1946.405	.039%	97.952%
46.0	11.081	0.874	1947.279	.038%	97.996%
47.0	10.821	0.868	1948.147	.038%	98.040%
48.0	10.617	0.865	1949.012	.038%	98.084%
49.0	10.399	0.861	1949.873	.038%	98.127%
50.0	10.216	0.858	1950.731	.038%	98.170%
51.0	10.069	0.858	1951.589	.038%	98.213%
52.0	9.942	0.859	1952.448	.038%	98.256%
53.0	9.830	0.861	1953.309	.038%	98.300%
54.0	9.731	0.863	1954.172	.038%	98.343%
55.0	9.640	0.866	1955.038	.038%	98.387%
56.0	9.563	0.869	1955.908	.038%	98.431%
57.0	9.499	0.874	1956.781	.038%	98.475%
58.0	9.443	0.878	1957.66	.039%	98.519%
59.0	9.401	0.884	1958.543	.039%	98.563%
60.0	9.366	0.889	1959.433	.039%	98.608%
61.0	9.338	0.896	1960.328	.039%	98.653%
62.0	9.302	0.901	1961.229	.040%	98.698%
63.0	9.288	0.908	1962.136	.040%	98.744%
64.0	9.274	0.914	1963.051	.040%	98.790%
65.0	9.239	0.918	1963.969	.040%	98.836%
66.0	9.211	0.923	1964.892	.041%	98.883%
67.0	9.183	0.927	1965.818	.041%	98.929%
68.0	9.155	0.931	1966.749	.041%	98.976%
69.0	9.148	0.937	1967.686	.041%	99.023%
70.0	9.134	0.941	1968.627	.041%	99.071%
71.0	9.091	0.943	1969.57	.041%	99.118%
72.0	9.077	0.947	1970.516	.042%	99.166%
73.0	9.021	0.946	1971.462	.042%	99.213%
74.0	9.000	0.949	1972.411	.042%	99.261%
75.0	8.965	0.950	1973.361	.042%	99.309%

Zonal flux distribution table

γ(°)	Average I(cd)	Zonal F(lm)	Sum F(lm)	Eff Flux(%)	Eff Sum(%)
76.0	8.951	0.952	1974.313	.042%	99.357%
77.0	8.916	0.953	1975.266	.042%	99.405%
78.0	8.902	0.955	1976.221	.042%	99.453%
79.0	8.852	0.953	1977.173	.042%	99.501%
80.0	8.838	0.954	1978.128	.042%	99.549%
81.0	8.824	0.956	1979.084	.042%	99.597%
82.0	8.838	0.960	1980.044	.042%	99.645%
83.0	8.831	0.961	1981.005	.042%	99.694%
84.0	8.719	0.951	1981.956	.042%	99.741%
85.0	8.691	0.949	1982.905	.042%	99.789%
86.0	8.712	0.953	1983.858	.042%	99.837%
87.0	8.571	0.939	1984.797	.041%	99.884%
88.0	8.402	0.921	1985.717	.040%	99.931%
89.0	8.381	0.919	1986.636	.040%	99.977%
90.0	8.353	0.458	1987.094	.020%	100.000%

Zonal flux distribution table

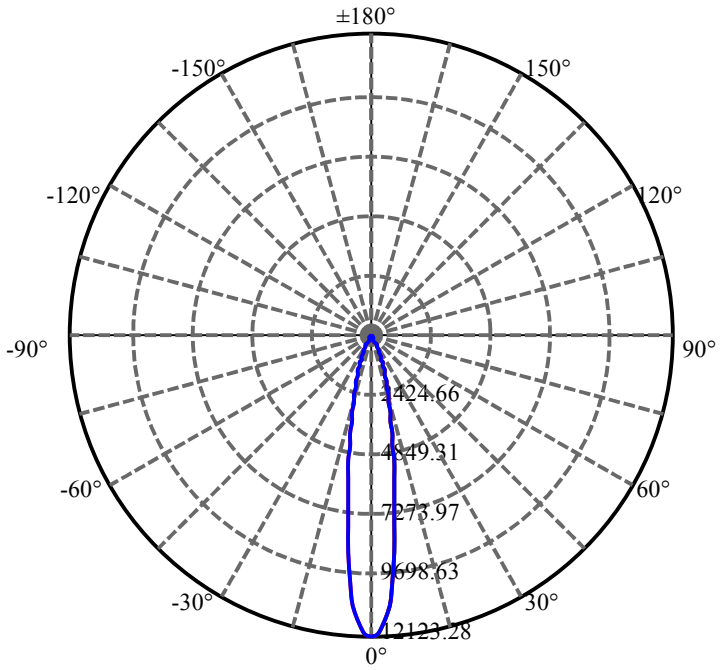
ZONAL LUMEN SUMMARY

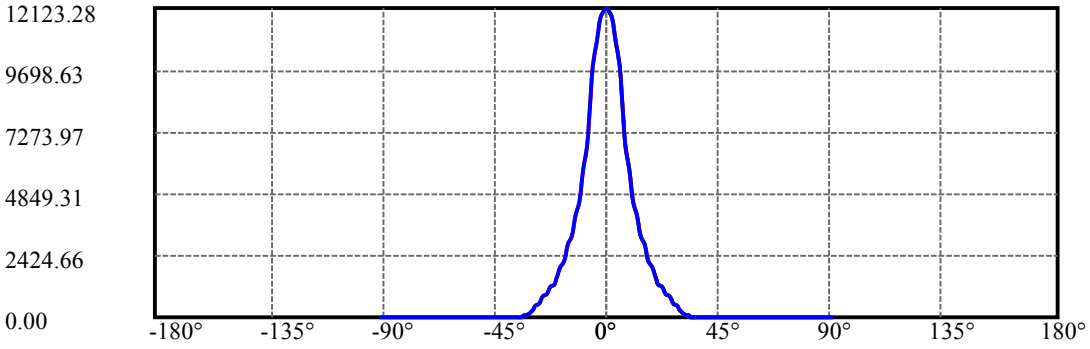
Zone	Lumens	%Lamp	%Fixt
0-30	1918.10	84.27%	96.53%
0-40	1941.92	85.32%	97.73%
0-60	1959.43	86.09%	98.61%
0-90	1986.64	87.29%	99.98%
0-120	1986.64	87.29%	99.98%
0-180	1987.09	87.31%	100.00%
60-90	28.09	1.23%	1.41%
90-120	0.00	0.00%	0.00%
90-130	0.00	0.00%	0.00%
90-150	0.00	0.00%	0.00%
90-180	0.00	0.00%	0.00%
0-20.13	1589.68	69.85%	80.00%

ZONAL LUMEN SUMMARY

0-10	815.97
10-20	767.11
20-30	335.02
30-40	23.82
40-50	8.81
50-60	8.70
60-70	9.19
70-80	9.50
80-90	8.51
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):

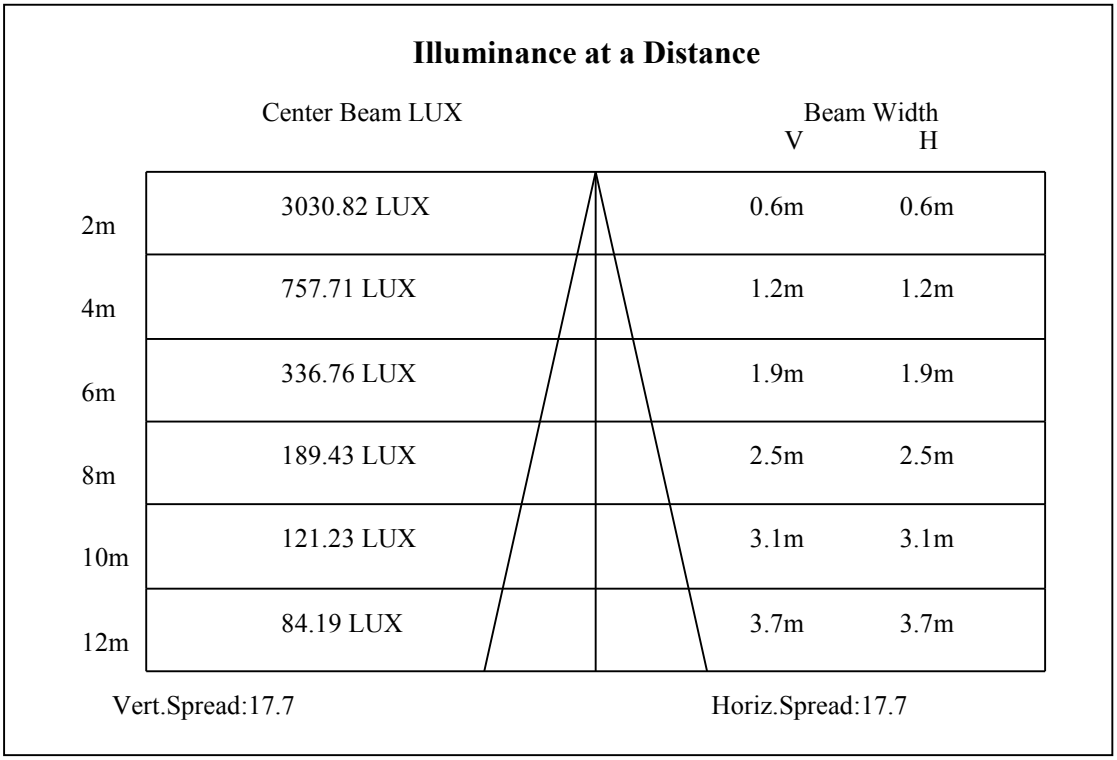
C0/C180:

C90/C270:

Field angle(10%Imax):C0/180Left:21.7 Right:21.7
:C90/270Left:21.7 Right:21.7

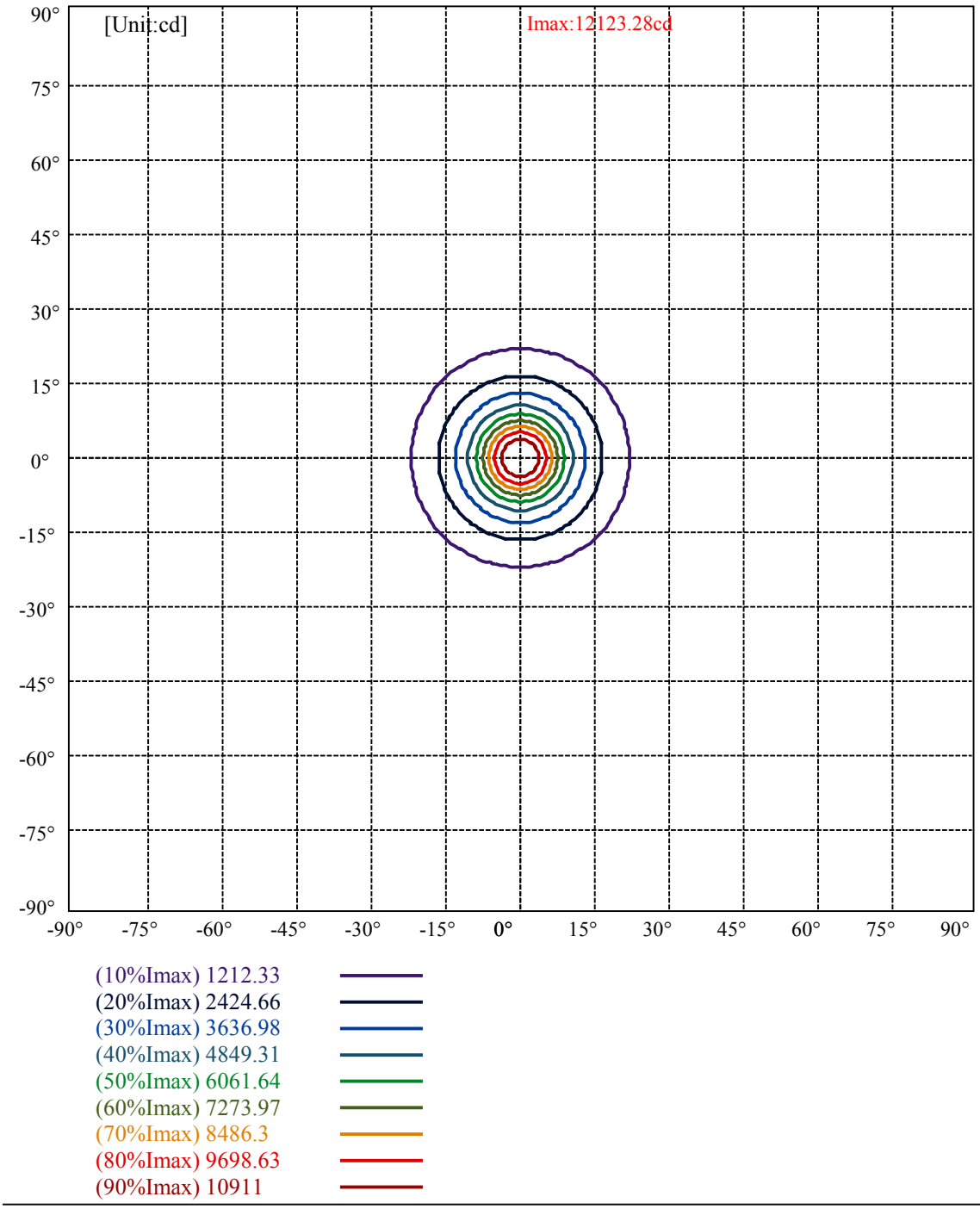
Beam Angle(50%Imax):C0/180Left:8.7 Right:8.7
:C90/270Left:8.7 Right:8.7

Lux distance Curve



Equipment: GMS1980 Date: 2019/1/22 Operator: NT07
Temperature(°C): 10.0 Humidity(%): 65.0% Distance(m): 7.50

ISO-Intensity(V-H)

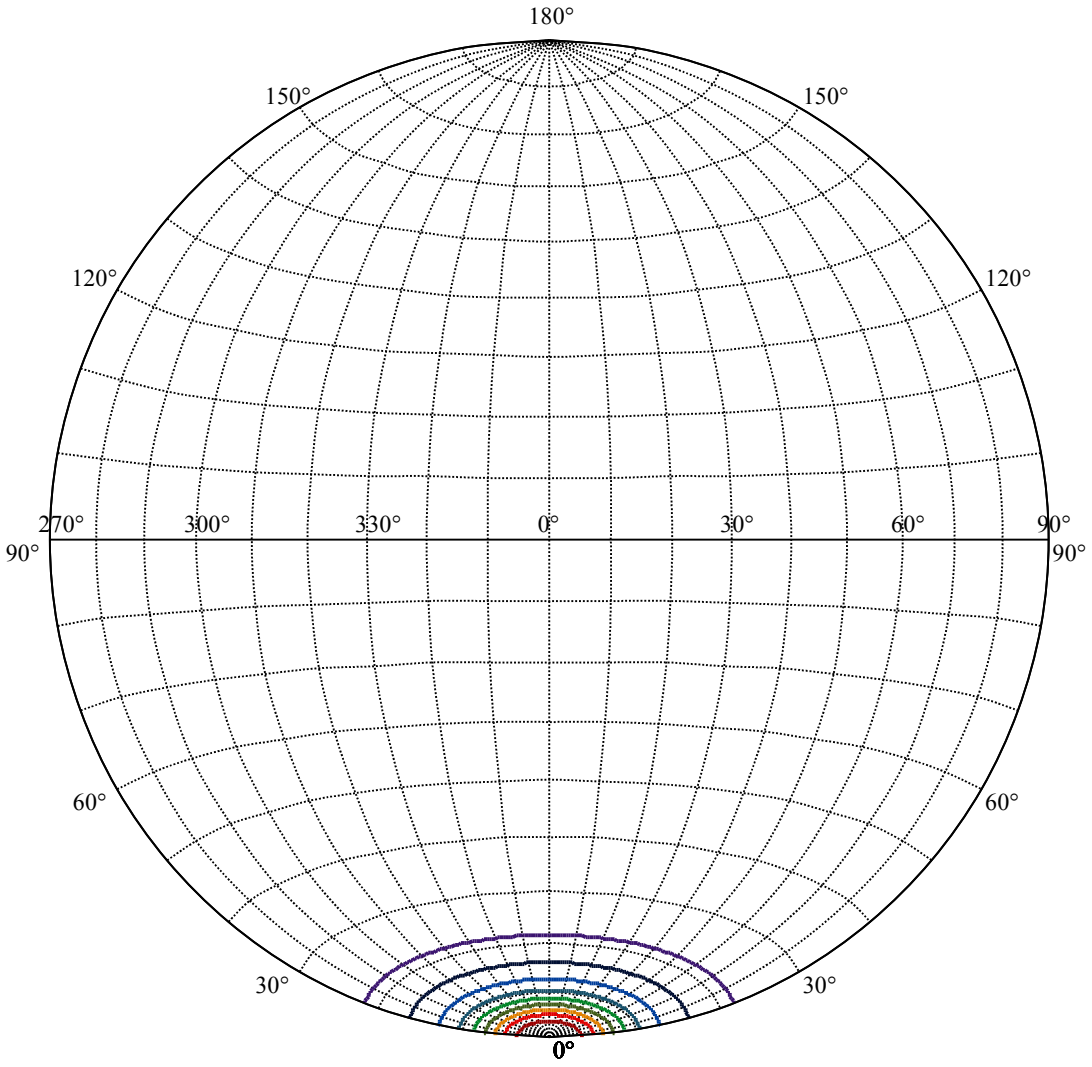


Equipment: GMS1980
Temperature(°C): 10.0

Date: 2019/1/22
Humidity(%): 65.0%

Operator: NT07
Distance(m): 7.50

ISO candela diagram on circular web



House [Unit:cd] Road

Imax:12123.28

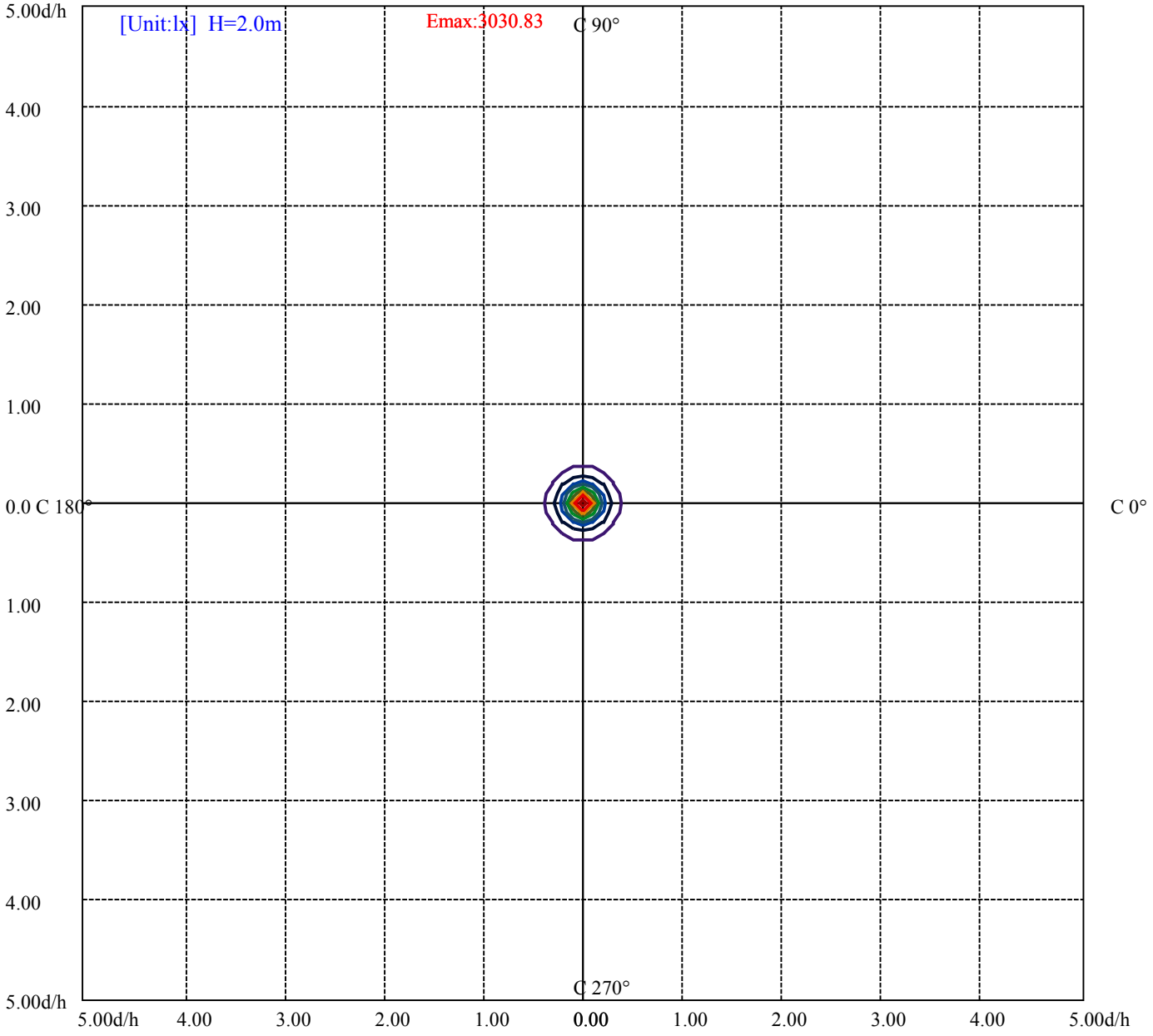
(10%Imax) 1212.33
(20%Imax) 2424.66
(30%Imax) 3636.98
(40%Imax) 4849.31
(50%Imax) 6061.64
(60%Imax) 7273.97
(70%Imax) 8486.3
(80%Imax) 9698.63
(90%Imax) 10911

Equipment: GMS1980
Temperature(°C): 10.0

Date: 2019/1/22
Humidity(%): 65.0%

Operator: NT07
Distance(m): 7.50

ISO illuminance diagram

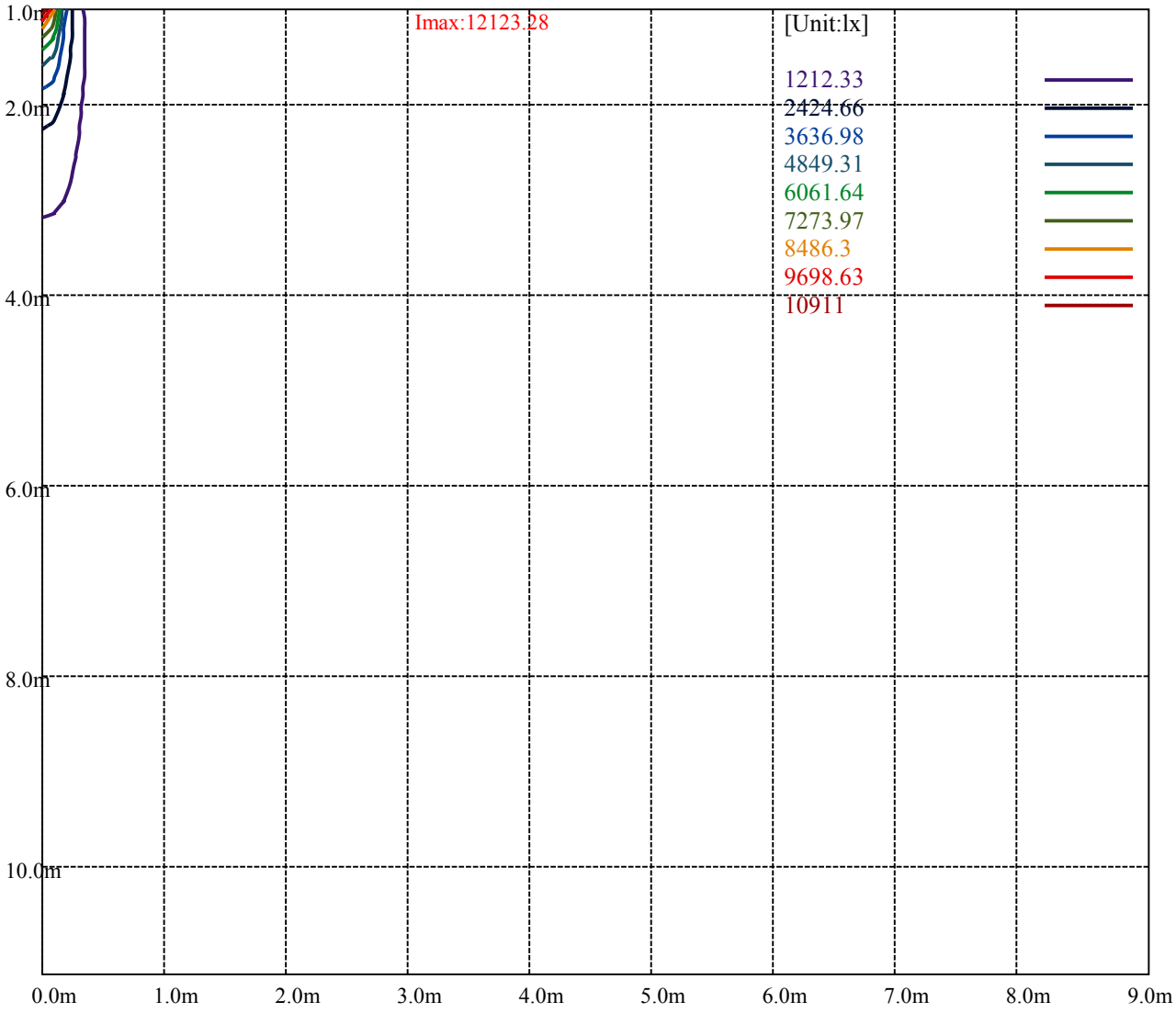


Equipment: GMS1980
Temperature(°C): 10.0

Date: 2019/1/22
Humidity(%): 65.0%

Operator: NT07
Distance(m): 7.50

Space ISO Lux diagram



Equipment: GMS1980
Temperature(°C): 10.0

Date: 2019/1/22
Humidity(%): 65.0%

Operator: NT07
Distance(m): 7.50

Luminance Limitting Curve(no luminous side)

Luminance Table

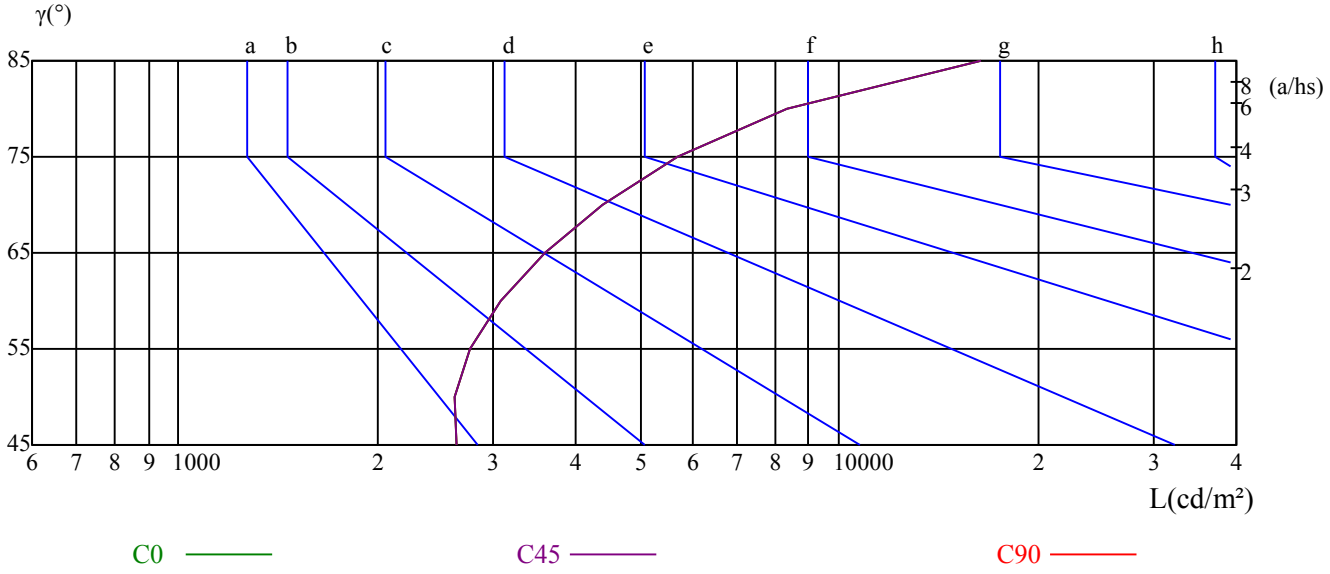
γ	45	50	55	60	65	70	75	80	85
C0	2640	2612	2762	3079	3593	4389	5693	8366	16390
C45	2640	2612	2762	3079	3593	4389	5693	8366	16390
C90	2640	2612	2762	3079	3593	4389	5693	8366	16390

L(Hor)(65)	L(Ver)(65)	L45(65)	L(Hor)(75)	L(Ver)(75)	L45(75)	L(Hor)(85)	L(Ver)(85)	L45(85)
3593	3593	3593	5693	5693	5693	16390	16390	16390

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: 2019/1/22
Humidity(%): 65.0%

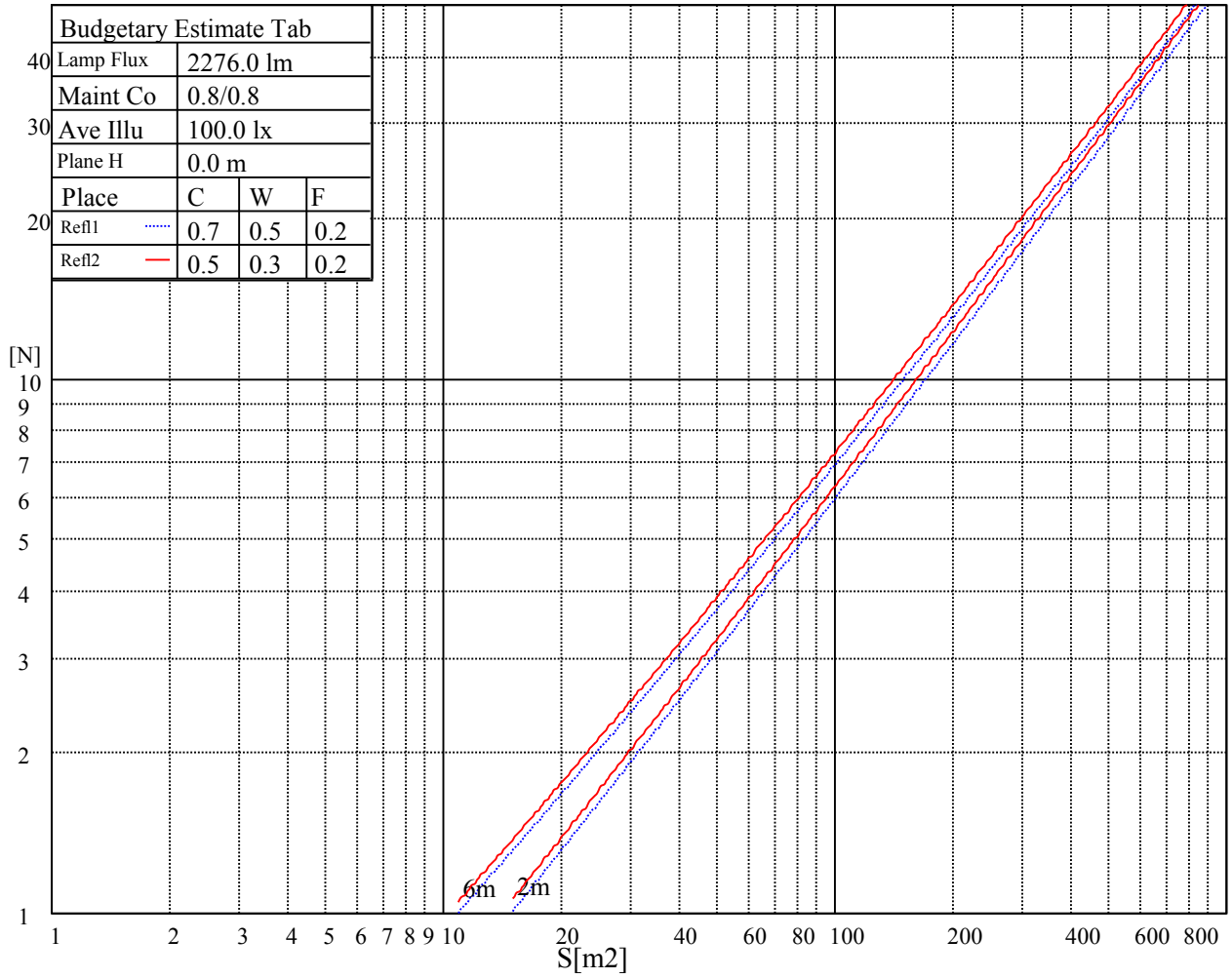
Operator: NT07
Distance(m): 7.50

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	2.20	3.11	2.57	3.42	3.74	2.10	3.01	2.47	3.33	3.64
	3H	5.56	6.36	5.95	6.70	7.07	5.47	6.27	5.85	6.60	6.97
	4H	7.35	8.09	7.75	8.44	8.83	7.26	8.00	7.67	8.36	8.75
	6H	9.32	10.00	9.74	10.38	10.78	9.24	9.92	9.66	10.30	10.70
	8H	10.40	11.03	10.83	11.43	11.84	10.34	10.97	10.77	11.37	11.78
	12H	12.11	12.72	12.55	13.10	13.53	12.11	12.71	12.54	13.10	13.53
4H	2H	3.13	3.87	3.54	4.22	4.62	3.06	3.80	3.47	4.16	4.55
	3H	6.71	7.32	7.12	7.73	8.13	6.63	7.24	7.05	7.65	8.06
	4H	8.65	9.20	9.09	9.62	10.07	8.58	9.12	9.02	9.55	10.00
	6H	10.76	11.22	11.23	11.67	12.15	10.70	11.16	11.17	11.61	12.09
	8H	11.94	12.37	12.41	12.82	13.30	11.89	12.33	12.37	12.78	13.26
	12H	13.56	13.93	14.05	14.42	14.90	13.57	13.94	14.06	14.43	14.91
8H	4H	9.37	9.80	9.84	10.25	10.73	9.31	9.74	9.79	10.19	10.67
	6H	11.75	12.09	12.26	12.59	13.08	11.70	12.04	12.21	12.55	13.03
	8H	13.11	13.41	13.65	13.94	14.44	13.08	13.39	13.62	13.91	14.41
	12H	14.88	15.13	15.40	15.63	16.22	14.89	15.15	15.41	15.65	16.23
12H	4H	9.57	9.94	10.06	10.43	10.91	9.52	9.89	10.01	10.38	10.86
	6H	12.25	12.36	12.60	12.83	13.38	12.21	12.32	12.56	12.79	13.34
	8H	13.55	13.81	14.08	14.31	14.89	13.53	13.79	14.06	14.29	14.87
Variation with the observer position at spacings:											
S = 1.0H		0.8/-1.4					0.8/-1.4				
S = 1.5H		0.5/-1.4					0.5/-1.4				
S = 2.0H		0.5/-1.1					0.5/-1.1				
Standard tables:		BKBF					BKBF				
Uncorrected UGR		-2.7					-2.7				

Equipment: GMS1980 Date: 2019/1/22 Operator: NT07
Temperature(°C): 10.0 Humidity(%): 65.0% Distance(m): 7.50

Budgetary Estimate Table

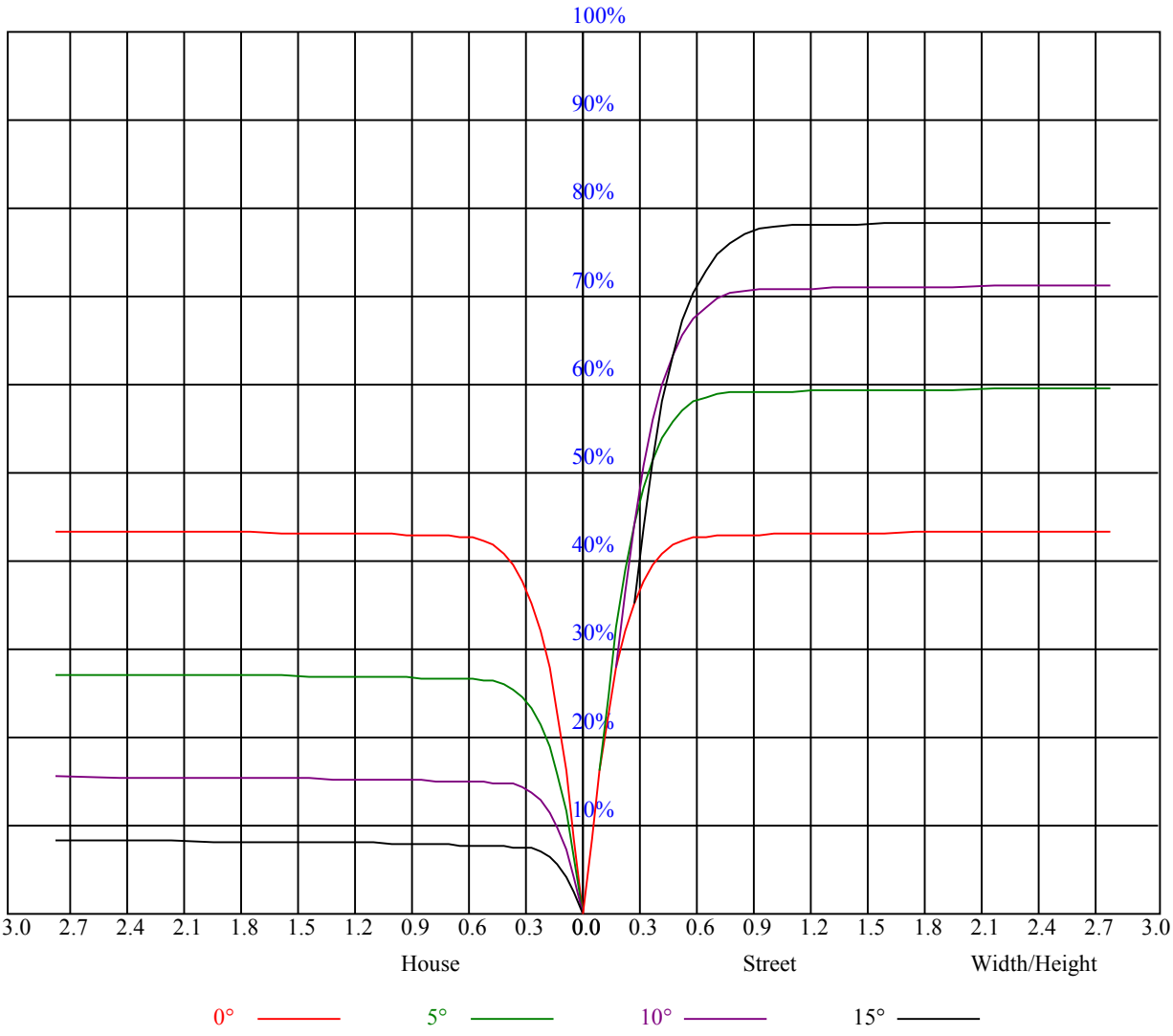


Equipment: GMS1980 Date: 2019/1/22 Operator: NT07
Temperature(°C): 10.0 Humidity(%): 65.0% Distance(m): 7.50

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	1.04	1.04	1.04	1.02	1.02	1.02	0.97	0.97	0.97	0.93	0.93	0.93	0.89	0.89	0.89	0.87
1	0.98	0.97	0.95	0.96	0.95	0.94	0.93	0.92	0.91	0.90	0.89	0.88	0.87	0.86	0.85	0.84
2	0.94	0.91	0.89	0.92	0.90	0.88	0.90	0.88	0.86	0.87	0.86	0.84	0.85	0.84	0.82	0.81
3	0.90	0.87	0.84	0.89	0.86	0.84	0.87	0.84	0.82	0.85	0.83	0.81	0.83	0.81	0.80	0.79
4	0.87	0.83	0.81	0.86	0.83	0.80	0.84	0.81	0.79	0.82	0.80	0.78	0.81	0.79	0.77	0.76
5	0.84	0.80	0.77	0.83	0.80	0.77	0.82	0.79	0.77	0.80	0.78	0.76	0.79	0.77	0.75	0.74
6	0.81	0.77	0.75	0.80	0.77	0.75	0.79	0.76	0.74	0.78	0.76	0.74	0.77	0.75	0.73	0.72
7	0.79	0.75	0.73	0.78	0.75	0.72	0.77	0.74	0.72	0.76	0.74	0.72	0.75	0.73	0.71	0.70
8	0.76	0.73	0.70	0.76	0.73	0.70	0.75	0.72	0.70	0.74	0.72	0.70	0.74	0.71	0.70	0.69
9	0.74	0.71	0.69	0.74	0.71	0.68	0.73	0.70	0.68	0.73	0.70	0.68	0.72	0.70	0.68	0.67
10	0.72	0.69	0.67	0.72	0.69	0.67	0.72	0.69	0.67	0.71	0.68	0.66	0.71	0.68	0.66	0.66

Coefficient Utilization Curve



Equipment: GMS1980	Date: 2019/1/22	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	12127.50	12206.25	12183.75	12026.25	11716.88	11176.88	10091.25	9011.25	7908.75
45.0	12065.63	12178.13	12166.88	12043.13	11790.00	11199.38	10428.75	9410.63	8161.88
90.0	12138.75	12110.63	11953.13	11202.19	11124.56	10254.94	9243.00	8012.25	6872.63
135.0	12161.25	12082.50	11846.25	11407.50	10788.75	10046.25	8623.13	7560.00	6721.88
180.0	12127.50	11885.63	11220.75	10789.31	9639.56	8699.06	7493.06	6440.06	5681.81
225.0	12065.63	11818.13	11165.63	10494.56	9510.75	8271.56	7240.50	6236.44	5430.94
270.0	12138.75	12054.38	11767.50	11317.50	10591.88	9489.38	8263.13	7228.13	6328.13
315.0	12161.25	12116.25	11970.00	11202.75	11025.00	10008.00	8810.44	7602.75	6636.94
360.0	12127.50	12206.25	12183.75	12026.25	11716.88	11176.88	10091.25	9011.25	7908.75

C/γ(°)	9.0	10.0	11.0	12.0	13.0	14.0	15.0	16.0	17.0
0.0	6671.25	5866.88	5208.75	4573.13	4033.13	3594.38	3166.88	2863.13	2496.38
45.0	6997.50	6120.00	5405.63	4736.25	4168.13	3718.13	3268.13	2880.00	2840.63
90.0	6022.13	5249.81	4628.25	4144.50	3706.88	3220.31	2881.69	2575.69	2261.25
135.0	5670.00	5045.63	4584.38	3993.75	3515.63	3189.38	2863.13	2509.88	2215.69
180.0	5053.50	4407.75	3954.94	3547.13	3096.56	2781.56	2496.94	2230.88	1926.56
225.0	4852.13	4289.06	3783.94	3384.00	3032.44	2648.25	2370.94	2109.38	1848.38
270.0	5428.13	4837.50	4325.63	3808.13	3346.88	2992.50	2868.75	2314.69	2050.31
315.0	5840.44	5097.94	4471.88	3980.81	3497.06	3078.00	2752.88	2454.19	2123.44
360.0	6671.25	5866.88	5208.75	4573.13	4033.13	3594.38	3166.88	2863.13	2496.38

C/γ(°)	18.0	19.0	20.0	21.0	22.0	23.0	24.0	25.0	26.0
0.0	2195.44	1949.63	1703.25	1487.81	1321.88	1186.88	1046.81	928.13	803.25
45.0	2268.56	2003.63	1779.75	1539.00	1356.75	1219.50	1081.69	974.25	858.94
90.0	1971.00	1744.31	1522.13	1337.63	1119.88	1080.00	972.96	842.63	710.94
135.0	1944.56	1724.06	1524.94	1353.94	1225.13	1113.19	971.44	847.69	724.50
180.0	1711.69	1499.06	1342.13	1117.52	1092.38	966.04	829.07	706.50	572.01
225.0	1622.81	1446.19	1279.69	1121.29	1039.39	888.86	780.92	643.11	510.98
270.0	1785.94	1580.06	1375.31	1205.44	1089.00	978.75	832.50	714.38	594.56
315.0	1886.63	1674.56	1461.38	1280.25	1122.08	1024.54	890.27	769.28	634.89
360.0	2195.44	1949.63	1703.25	1487.81	1321.88	1186.88	1046.81	928.13	803.25

C/γ(°)	27.0	28.0	29.0	30.0	31.0	32.0	33.0	34.0	35.0
0.0	663.19	529.88	419.06	307.13	284.63	130.89	77.79	31.11	21.88
45.0	714.38	596.25	481.50	359.44	285.75	166.78	91.41	40.50	23.96
90.0	595.46	484.37	354.26	261.23	180.23	96.53	49.11	27.23	21.26
135.0	588.38	459.00	349.31	284.63	143.27	79.14	34.03	22.28	18.68
180.0	456.81	335.59	228.60	146.48	82.07	32.06	21.54	18.68	15.69
225.0	397.29	293.91	185.63	115.09	60.86	25.99	20.25	17.49	15.64
270.0	453.38	351.56	293.06	167.06	96.98	51.19	26.33	20.64	17.72
315.0	516.99	392.06	282.88	198.34	126.73	57.43	28.35	21.43	17.55
360.0	663.19	529.88	419.06	307.13	284.63	130.89	77.79	31.11	21.88

C/γ(°)	36.0	37.0	38.0	39.0	40.0	41.0	42.0	43.0	44.0
0.0	19.07	16.20	15.36	14.68	14.01	13.50	13.11	12.66	12.32
45.0	19.63	16.59	15.41	14.57	13.95	13.39	12.88	12.49	12.15
90.0	17.44	15.86	14.74	14.12	13.44	12.88	12.49	12.09	11.70
135.0	15.75	15.02	14.34	13.67	13.16	12.71	12.21	11.81	11.48
180.0	15.02	14.46	13.89	13.33	12.94	12.54	12.21	11.87	11.53
225.0	14.85	14.18	13.56	12.99	12.54	12.21	11.81	11.48	11.19
270.0	15.86	14.91	14.06	13.39	12.88	12.43	11.98	11.70	11.42
315.0	15.86	15.02	14.18	13.56	12.99	12.49	12.09	11.70	11.31
360.0	19.07	16.20	15.36	14.68	14.01	13.50	13.11	12.66	12.32

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	12.04	11.64	11.42	11.19	10.91	10.69	10.52	10.35	10.13
45.0	11.81	11.53	11.31	11.08	10.74	10.52	10.24	10.01	9.90
90.0	11.48	11.19	10.86	10.69	10.46	10.24	10.13	10.07	9.96
135.0	11.19	10.91	10.63	10.41	10.24	10.01	9.90	9.73	9.62
180.0	11.25	10.97	10.69	10.52	10.29	10.13	10.01	9.84	9.73
225.0	10.91	10.69	10.46	10.18	10.07	9.96	9.79	9.73	9.62
270.0	11.08	10.86	10.63	10.46	10.24	10.13	10.01	9.96	9.90
315.0	11.08	10.86	10.58	10.41	10.24	10.07	9.96	9.84	9.79
360.0	12.04	11.64	11.42	11.19	10.91	10.69	10.52	10.35	10.13

C/γ(°)	54.0	55.0	56.0	57.0	58.0	59.0	60.0	61.0	62.0
0.0	10.01	9.84	9.68	9.56	9.51	9.45	9.34	9.34	9.28
45.0	9.79	9.68	9.56	9.51	9.45	9.39	9.39	9.34	9.34
90.0	9.90	9.84	9.79	9.73	9.62	9.62	9.56	9.56	9.51
135.0	9.45	9.39	9.34	9.28	9.23	9.17	9.11	9.06	9.06
180.0	9.62	9.51	9.45	9.39	9.34	9.28	9.23	9.23	9.23
225.0	9.56	9.45	9.45	9.39	9.34	9.34	9.34	9.34	9.28
270.0	9.84	9.79	9.73	9.68	9.68	9.62	9.62	9.56	9.51
315.0	9.68	9.62	9.51	9.45	9.39	9.34	9.34	9.28	9.23
360.0	10.01	9.84	9.68	9.56	9.51	9.45	9.34	9.34	9.28

C/γ(°)	63.0	64.0	65.0	66.0	67.0	68.0	69.0	70.0	71.0
0.0	9.28	9.28	9.23	9.23	9.23	9.23	9.17	9.17	9.11
45.0	9.28	9.28	9.28	9.23	9.17	9.11	9.11	9.06	9.06
90.0	9.45	9.39	9.34	9.34	9.23	9.23	9.23	9.23	9.17
135.0	9.06	9.06	9.00	9.00	9.00	8.94	8.94	8.89	8.89
180.0	9.23	9.23	9.23	9.17	9.17	9.11	9.11	9.11	9.06
225.0	9.28	9.28	9.28	9.28	9.23	9.23	9.23	9.23	9.17
270.0	9.51	9.45	9.39	9.34	9.34	9.34	9.34	9.34	9.28
315.0	9.23	9.23	9.17	9.11	9.11	9.06	9.06	9.06	9.00
360.0	9.28	9.28	9.23	9.23	9.23	9.23	9.17	9.17	9.11

C/γ(°)	72.0	73.0	74.0	75.0	76.0	77.0	78.0	79.0	80.0
0.0	9.11	9.06	9.06	9.06	9.00	9.00	9.00	8.89	8.89
45.0	9.06	9.00	8.94	8.89	8.89	8.83	8.83	8.78	8.78
90.0	9.17	9.11	9.11	9.00	9.00	9.00	8.94	8.94	8.89
135.0	8.89	8.83	8.83	8.78	8.78	8.72	8.72	8.72	8.66
180.0	9.00	8.94	8.94	8.94	8.94	8.89	8.89	8.78	8.78
225.0	9.11	9.06	9.00	9.00	9.00	9.00	8.94	8.94	9.00
270.0	9.28	9.23	9.23	9.17	9.17	9.06	9.11	9.06	9.00
315.0	9.00	8.94	8.89	8.89	8.83	8.83	8.78	8.72	8.72
360.0	9.11	9.06	9.06	9.06	9.00	9.00	9.00	8.89	8.89

C/γ(°)	81.0	82.0	83.0	84.0	85.0	86.0	87.0	88.0	89.0
0.0	8.83	8.83	8.83	8.83	8.83	8.83	8.83	8.55	8.49
45.0	8.72	8.72	8.66	8.61	8.61	8.61	8.55	8.49	8.44
90.0	8.83	8.78	8.72	8.61	8.55	8.49	8.38	8.33	8.33
135.0	8.72	8.66	8.61	8.61	8.55	8.61	8.44	8.33	8.33
180.0	8.72	8.78	8.83	8.72	8.72	8.78	8.55	8.44	8.38
225.0	9.06	9.34	9.45	8.89	8.94	9.00	8.44	8.38	8.38
270.0	9.00	8.94	8.89	8.78	8.66	8.66	8.66	8.33	8.33
315.0	8.72	8.66	8.66	8.72	8.66	8.72	8.72	8.38	8.38
360.0	8.83	8.83	8.83	8.83	8.83	8.83	8.83	8.55	8.49

Intensity data(cd)

C/γ(°)	90.0
0.0	8.49
45.0	8.44
90.0	8.33
135.0	8.27
180.0	8.33
225.0	8.38
270.0	8.27
315.0	8.33
360.0	8.49