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NATA

Client:
LumCAT: 2-2646-L
Luminaire: 92.70.411.00
Report No: 20231016-B006
Ballast type: AC

Test No: 20231016-C006	Voltage(V): 34.290
LampCAT: NICHIA NFCWJ108B-V3	Current(A): 0.576
Lamp flux(lm): 2574.8	Power (W): 19.751
Number of Lamps: 1	PF: 0.000
Length(mm): 0	Width(mm): 0
Phm Type: C	Height(mm): 0

Photometric Results

Lumens(lm): 2347.92, Efficiency(%): 91.19% , Luminous Efficacy(lm/W): 118.88
Central intensity(cd): 4051.330, Maximum intensity(cd): 4051.330
Angle of maximum intensity: C=0.0 γ=0.0
Beam Angle(50%Imax): [C0/180]Total=47.2
[C90/270]Total=47.2
Field angle(10%Imax): [C0/180]Total=67.0
[C90/270]Total=67.0
Maximum s/h(1/2): C0_180=0.75 C90_270=0.75
Maximum s/h(1/4): C0_180=0.72 C90_270=0.72
Up flux rate of lamp(%): 0.00%
Down flux rate of lamp(%): 91.19%
Up flux rate of LUM(%): - -
Down flux rate of LUM(%): 100.00%
CIE Type : Direct lighting
Output flux ratio in π solid angle : 98.011%

Zonal flux distribution table

γ(°)	Average I(cd)	Zonal F(lm)	Sum F(lm)	Eff Flux(%)	Eff Sum(%)
0.0	4051.330	0.000	0	0.00%	0.00%
1.0	4042.058	3.873	3.873	0.15%	0.16%
2.0	4017.149	11.567	15.44	0.45%	0.66%
3.0	3983.799	19.136	34.576	0.74%	1.47%
4.0	3934.326	26.504	61.08	1.03%	2.60%
5.0	3883.678	33.633	94.713	1.31%	4.03%
6.0	3815.108	40.459	135.172	1.57%	5.76%
7.0	3754.220	46.983	182.154	1.82%	7.76%
8.0	3690.840	53.283	235.437	2.07%	10.03%
9.0	3622.686	59.272	294.71	2.30%	12.55%
10.0	3555.777	64.962	359.672	2.52%	15.32%
11.0	3477.867	70.281	429.952	2.73%	18.31%
12.0	3401.686	75.203	505.156	2.92%	21.52%
13.0	3319.071	79.758	584.914	3.10%	24.91%
14.0	3226.423	83.782	668.696	3.25%	28.48%
15.0	3138.895	87.386	756.082	3.39%	32.20%
16.0	3030.333	90.396	846.478	3.51%	36.05%
17.0	2921.978	92.693	939.172	3.60%	40.00%
18.0	2794.803	94.257	1033.429	3.66%	44.01%
19.0	2673.856	95.143	1128.573	3.70%	48.07%
20.0	2537.063	95.374	1223.947	3.70%	52.13%
21.0	2390.860	94.626	1318.573	3.68%	56.16%
22.0	2260.087	93.463	1412.036	3.63%	60.14%
23.0	2111.878	91.736	1503.771	3.56%	64.05%
24.0	1968.651	89.215	1592.986	3.46%	67.85%
25.0	1814.560	86.022	1679.008	3.34%	71.51%
26.0	1596.841	80.527	1759.535	3.13%	74.94%
27.0	1439.540	74.286	1833.821	2.89%	78.10%
28.0	1242.308	67.899	1901.719	2.64%	81.00%
29.0	1109.985	61.543	1963.262	2.39%	83.62%
30.0	928.674	55.043	2018.305	2.14%	85.96%
31.0	761.057	47.023	2065.328	1.83%	87.96%
32.0	608.793	39.245	2104.573	1.52%	89.64%
33.0	462.957	31.574	2136.147	1.23%	90.98%
34.0	342.680	24.381	2160.528	0.95%	92.02%
35.0	259.684	18.707	2179.235	0.73%	92.82%
36.0	224.576	15.419	2194.654	0.60%	93.47%
37.0	174.668	13.021	2207.675	0.51%	94.03%

Zonal flux distribution table

γ(°)	Average I(cd)	Zonal F(lm)	Sum F(lm)	Eff Flux(%)	Eff Sum(%)
38.0	124.324	9.980	2217.655	0.39%	94.45%
39.0	106.016	7.862	2225.517	0.31%	94.79%
40.0	92.572	6.926	2232.443	0.27%	95.08%
41.0	81.467	6.197	2238.641	0.24%	95.35%
42.0	72.216	5.584	2244.224	0.22%	95.58%
43.0	64.494	5.064	2249.288	0.20%	95.80%
44.0	58.398	4.638	2253.927	0.18%	96.00%
45.0	53.368	4.295	2258.222	0.17%	96.18%
46.0	49.064	4.006	2262.228	0.16%	96.35%
47.0	45.079	3.744	2265.972	0.15%	96.51%
48.0	41.972	3.519	2269.491	0.14%	96.66%
49.0	39.225	3.334	2272.825	0.13%	96.80%
50.0	36.623	3.162	2275.988	0.12%	96.94%
51.0	34.292	3.000	2278.988	0.12%	97.06%
52.0	32.389	2.861	2281.849	0.11%	97.19%
53.0	30.645	2.742	2284.591	0.11%	97.30%
54.0	29.005	2.629	2287.221	0.10%	97.41%
55.0	27.656	2.529	2289.75	0.10%	97.52%
56.0	26.321	2.439	2292.189	0.09%	97.63%
57.0	25.276	2.359	2294.548	0.09%	97.73%
58.0	24.224	2.289	2296.837	0.09%	97.82%
59.0	23.332	2.223	2299.06	0.09%	97.92%
60.0	22.467	2.164	2301.224	0.08%	98.01%
61.0	21.706	2.108	2303.332	0.08%	98.10%
62.0	21.034	2.059	2305.391	0.08%	98.19%
63.0	20.329	2.012	2307.403	0.08%	98.27%
64.0	19.734	1.966	2309.369	0.08%	98.36%
65.0	19.166	1.925	2311.294	0.07%	98.44%
66.0	18.647	1.887	2313.181	0.07%	98.52%
67.0	18.101	1.848	2315.029	0.07%	98.60%
68.0	17.596	1.808	2316.837	0.07%	98.68%
69.0	17.139	1.772	2318.609	0.07%	98.75%
70.0	16.648	1.735	2320.344	0.07%	98.83%
71.0	16.226	1.699	2322.043	0.07%	98.90%
72.0	15.790	1.665	2323.708	0.06%	98.97%
73.0	15.374	1.630	2325.337	0.06%	99.04%
74.0	14.952	1.594	2326.932	0.06%	99.11%
75.0	14.558	1.559	2328.491	0.06%	99.17%

Zonal flux distribution table

γ(°)	Average I(cd)	Zonal F(lm)	Sum F(lm)	Eff Flux(%)	Eff Sum(%)
76.0	14.150	1.524	2330.015	0.06%	99.24%
77.0	13.728	1.486	2331.501	0.06%	99.30%
78.0	13.368	1.450	2332.952	0.06%	99.36%
79.0	12.987	1.416	2334.368	0.05%	99.42%
80.0	12.607	1.380	2335.747	0.05%	99.48%
81.0	12.302	1.347	2337.095	0.05%	99.54%
82.0	11.943	1.315	2338.409	0.05%	99.59%
83.0	11.645	1.282	2339.692	0.05%	99.65%
84.0	11.361	1.253	2340.945	0.05%	99.70%
85.0	11.071	1.224	2342.169	0.05%	99.76%
86.0	10.842	1.198	2343.367	0.05%	99.81%
87.0	10.614	1.174	2344.541	0.05%	99.86%
88.0	10.372	1.150	2345.691	0.04%	99.91%
89.0	10.116	1.123	2346.814	0.04%	99.95%
90.0	10.047	1.105	2347.919	0.04%	100.00%

Zonal flux distribution table

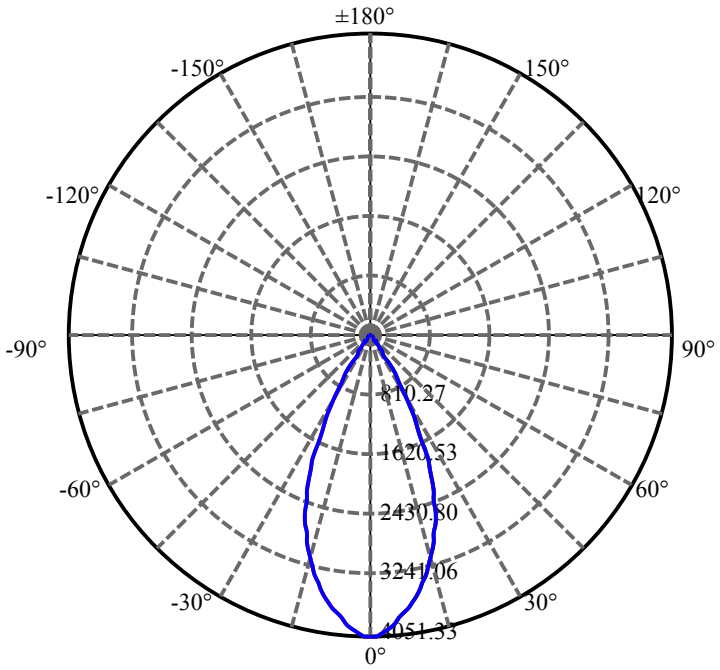
ZONAL LUMEN SUMMARY

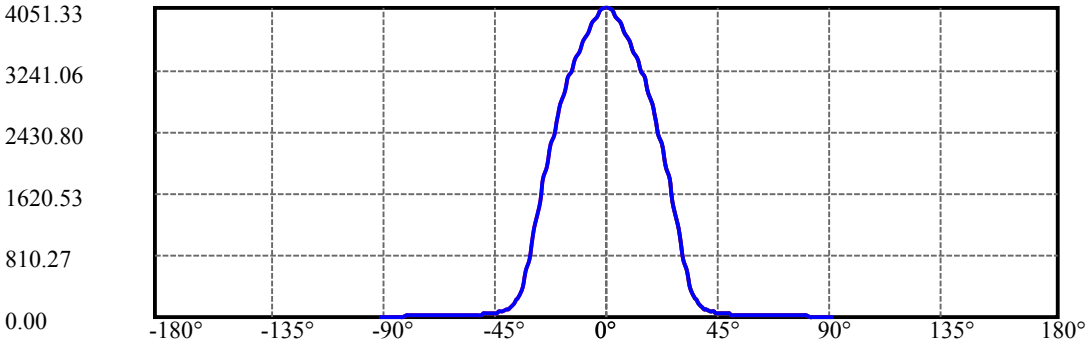
Zone	Lumens	%Lamp	%Fixt
0-30	2018.31	78.39%	85.96%
0-40	2232.44	86.70%	95.08%
0-60	2301.22	89.38%	98.01%
0-90	2346.81	91.15%	99.95%
0-120	2346.81	91.15%	99.95%
0-180	2347.92	91.19%	100.00%
60-90	45.59	1.77%	1.94%
90-120	0.00	0.00%	0.00%
90-130	0.00	0.00%	0.00%
90-150	0.00	0.00%	0.00%
90-180	0.00	0.00%	0.00%
0-27.66	1878.34	72.95%	80.00%

ZONAL LUMEN SUMMARY

0-10	359.67
10-20	864.28
20-30	794.36
30-40	214.14
40-50	43.54
50-60	25.24
60-70	19.12
70-80	15.40
80-90	11.07
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):

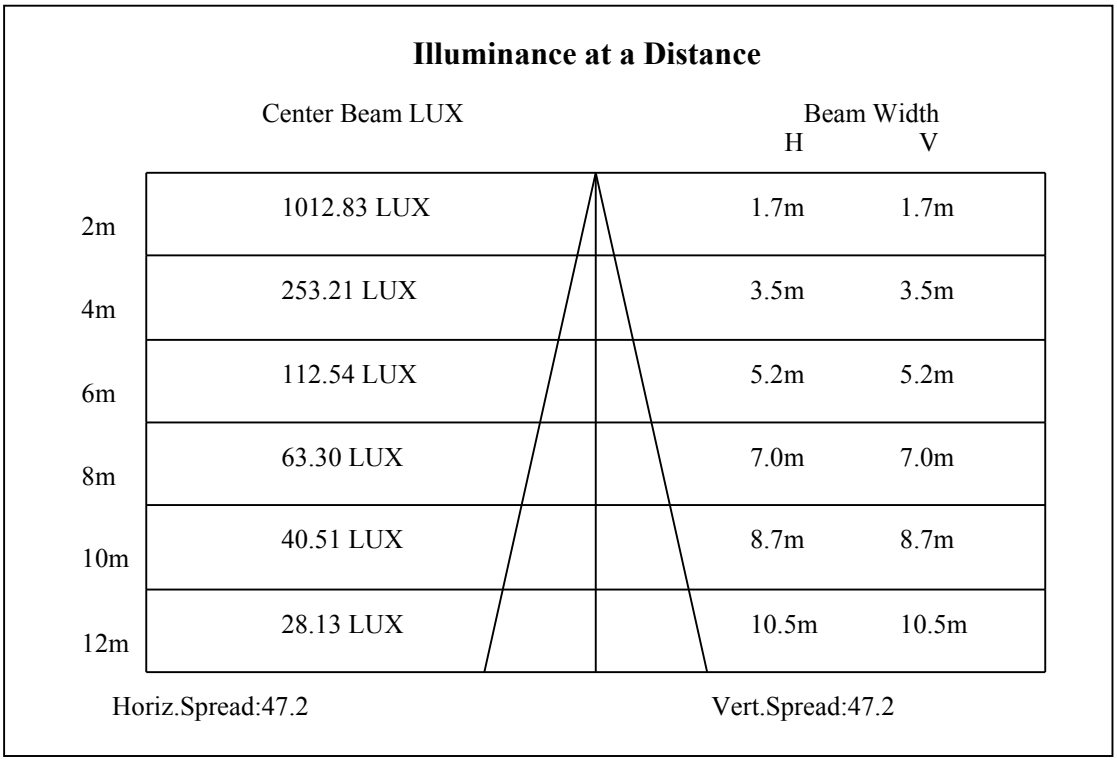
C0/C180:

C90/C270:

Field angle(10%Imax):C0/180Left:33.5 Right:33.5
:C90/270Left:33.5 Right:33.5

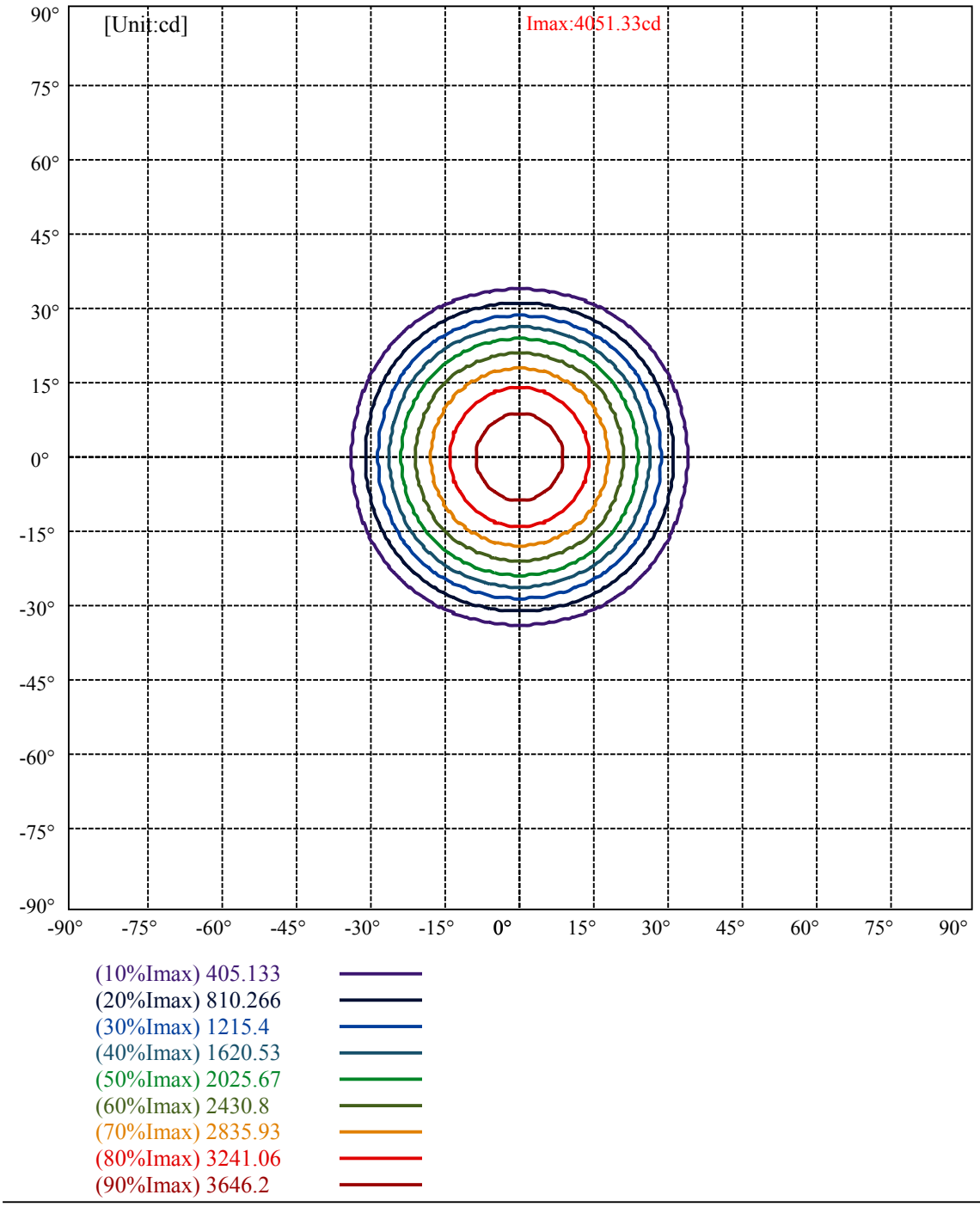
Beam Angle(50%Imax):C0/180Left:23.6 Right:23.6
:C90/270Left:23.6 Right:23.6

Lux distance Curve



Equipment: GMS1980 Date: 2023/10/16 Operator: NT07
Temperature(°C): 0.0 Humidity(%): 0.0% Distance(m): 7.44

ISO-Intensity(V-H)

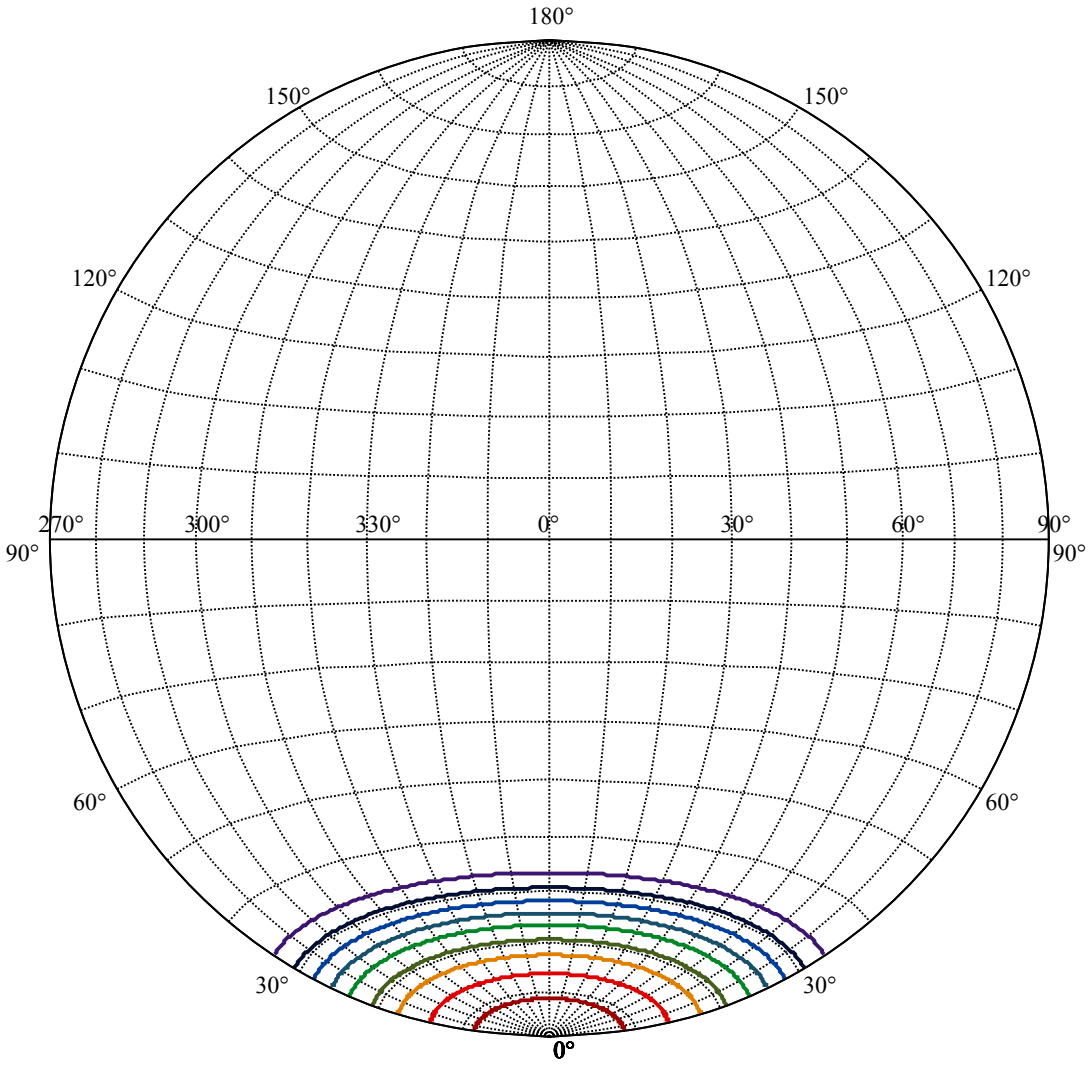


Equipment: GMS1980
Temperature(°C): 0.0

Date: 2023/10/16
Humidity(%): 0.0%

Operator: NT07
Distance(m): 7.44

ISO candela diagram on circular web



House [Unit:cd] Road

Imax:4051.33

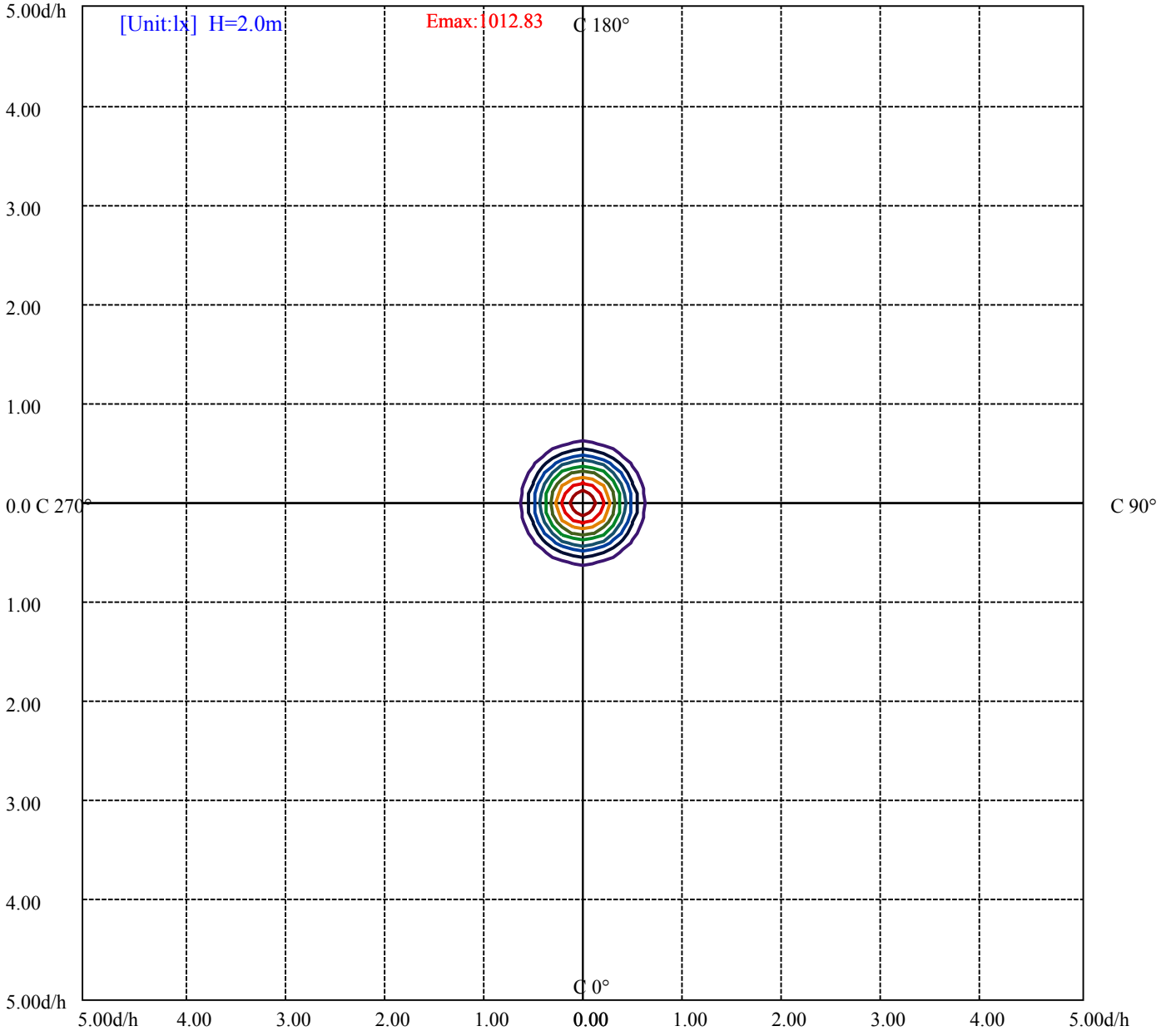
(10%Imax) 405.133
(20%Imax) 810.266
(30%Imax) 1215.4
(40%Imax) 1620.53
(50%Imax) 2025.67
(60%Imax) 2430.8
(70%Imax) 2835.93
(80%Imax) 3241.06
(90%Imax) 3646.2

Equipment: GMS1980
Temperature(°C): 0.0

Date: 2023/10/16
Humidity(%): 0.0%

Operator: NT07
Distance(m): 7.44

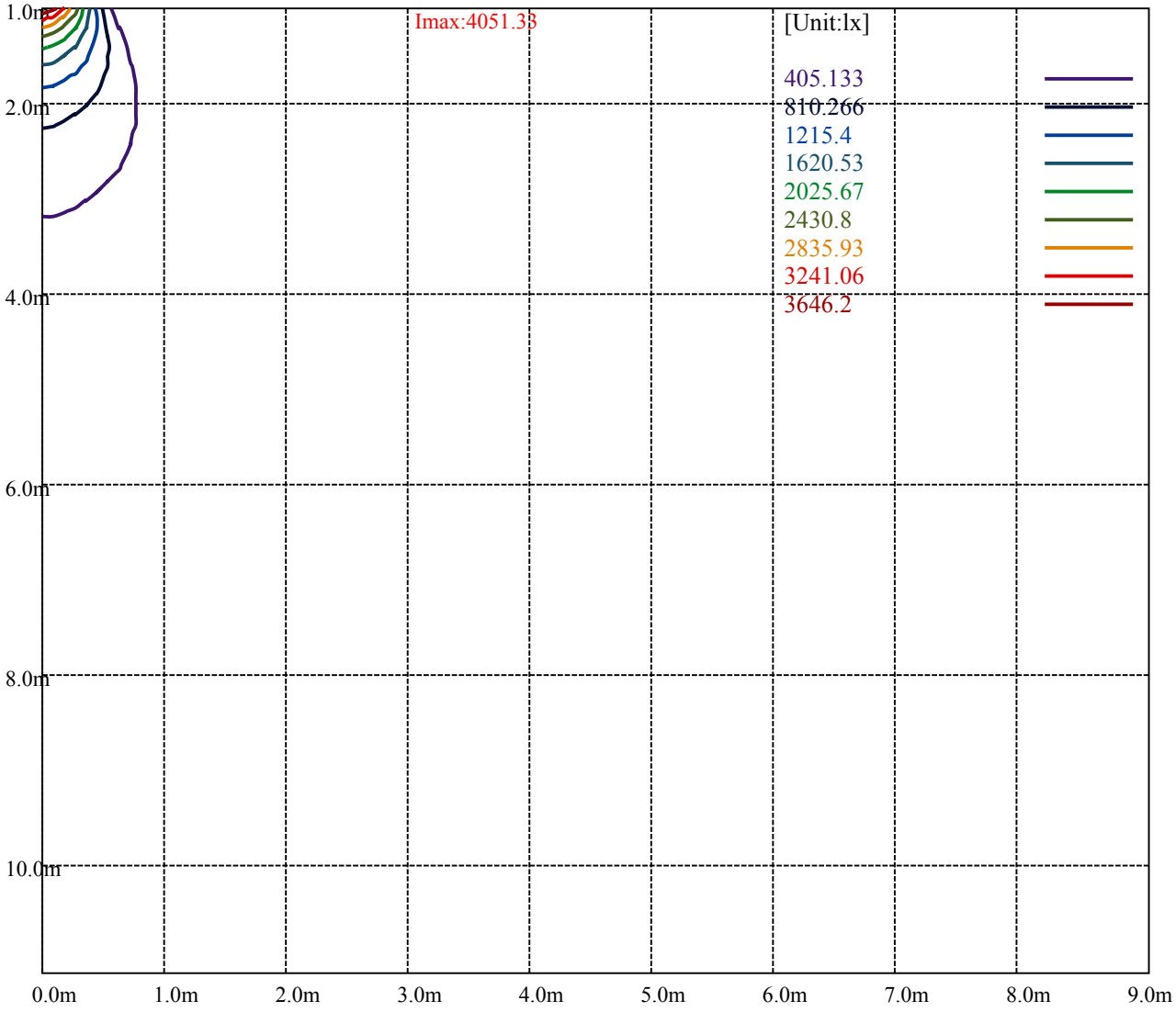
ISO illuminance diagram



(10%Emax) 101.2832
(20%Emax) 202.5665
(30%Emax) 303.85
(40%Emax) 405.1325
(50%Emax) 506.415
(60%Emax) 607.7
(70%Emax) 708.9825
(80%Emax) 810.265
(90%Emax) 911.55

Equipment: GMS1980
Temperature(°C): 0.0
Date: 2023/10/16
Humidity(%): 0.0%
Operator: NT07
Distance(m): 7.44

Space ISO Lux diagram



Equipment: GMS1980
Temperature(°C): 0.0

Date: 2023/10/16
Humidity(%): 0.0%

Operator: NT07
Distance(m): 7.44

Luminance Limitting Curve(no luminous side)

Luminance Table

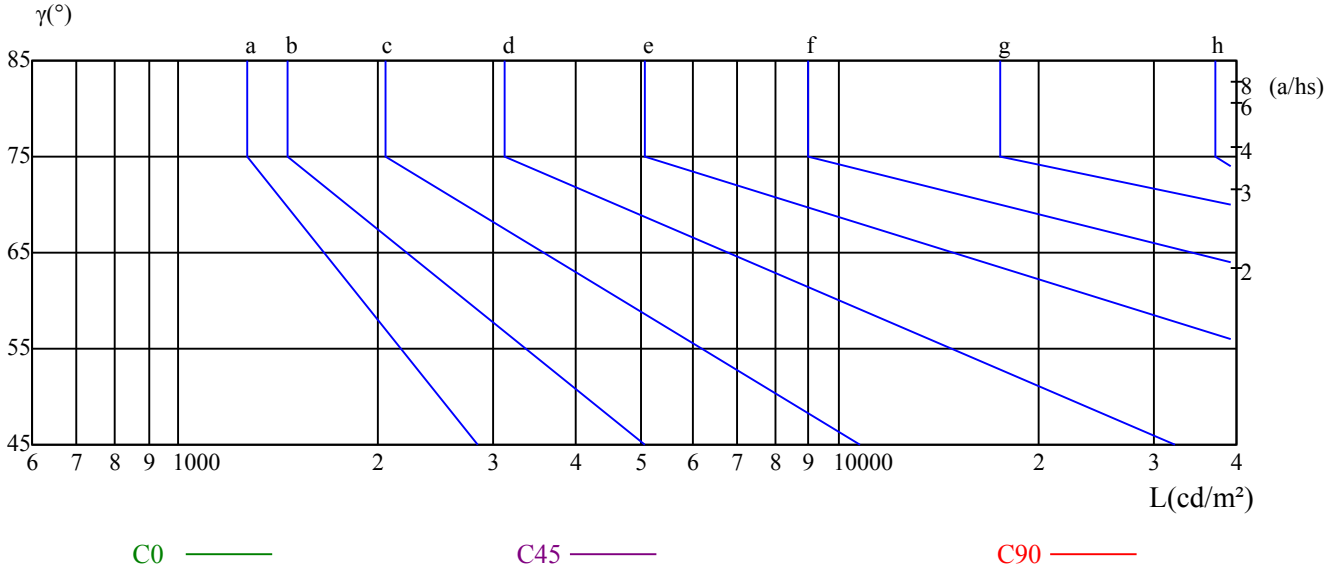
γ	45	50	55	60	65	70	75	80	85
C0	0	0	0	0	0	0	0	0	0
C45	0	0	0	0	0	0	0	0	0
C90	0	0	0	0	0	0	0	0	0

L(Hor)(65)	L(Ver)(65)	L45(65)	L(Hor)(75)	L(Ver)(75)	L45(75)	L(Hor)(85)	L(Ver)(85)	L45(85)
0	0	0	0	0	0	0	0	0

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

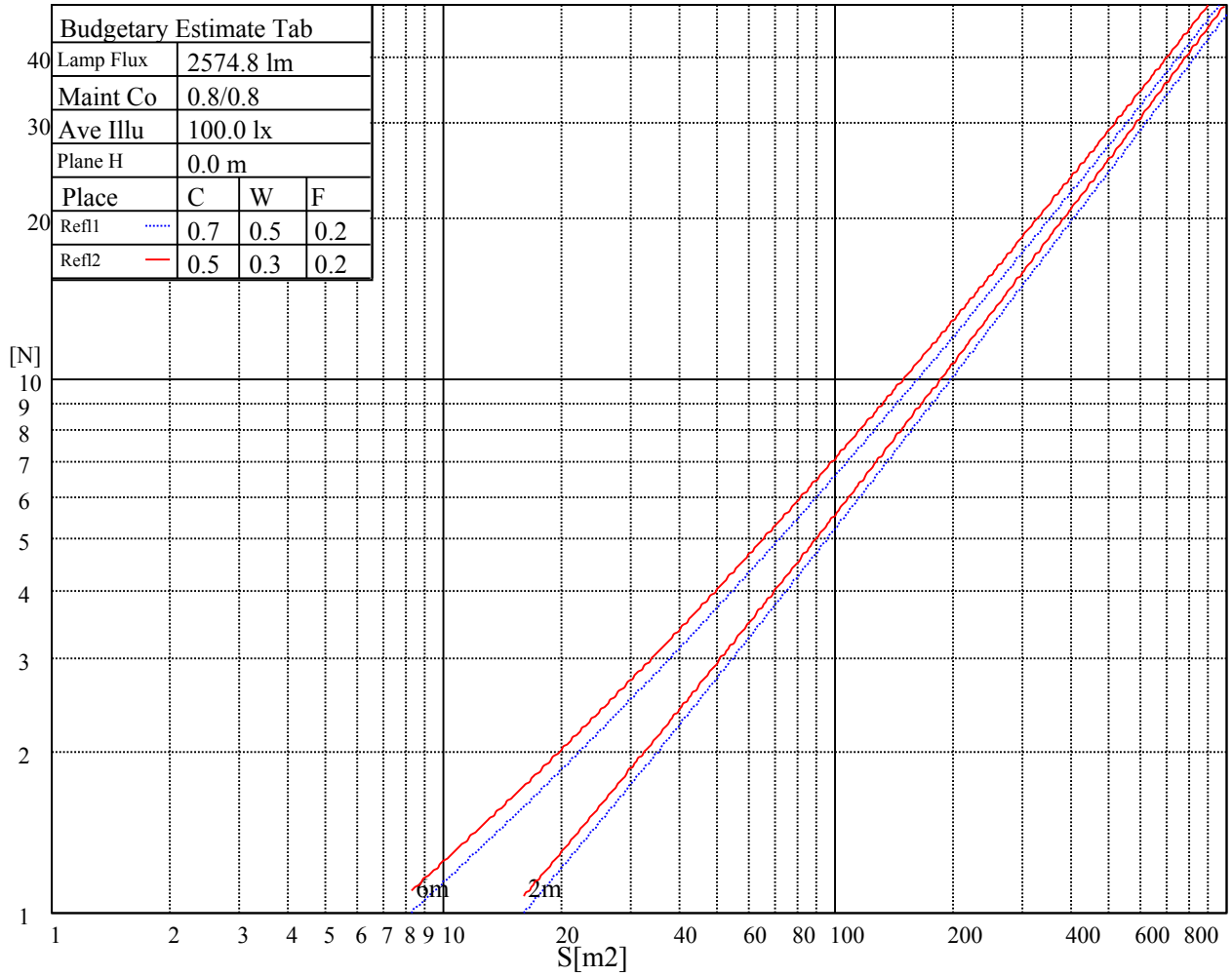


UGR Glare

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	非数字	非数字	非数字	非数字	非数字	非数字	非数字	非数字	非数字	非数字
	3H	非数字	非数字	非数字	非数字	非数字	非数字	非数字	非数字	非数字	非数字
	4H	非数字	非数字	非数字	非数字	非数字	非数字	非数字	非数字	非数字	非数字
	6H	非数字	非数字	非数字	非数字	非数字	非数字	非数字	非数字	非数字	非数字
	8H	非数字	非数字	非数字	非数字	非数字	非数字	非数字	非数字	非数字	非数字
	12H	非数字	非数字	非数字	非数字	非数字	非数字	非数字	非数字	非数字	非数字
4H	2H	非数字	非数字	非数字	非数字	非数字	非数字	非数字	非数字	非数字	非数字
	3H	非数字	非数字	非数字	非数字	非数字	非数字	非数字	非数字	非数字	非数字
	4H	非数字	非数字	非数字	非数字	非数字	非数字	非数字	非数字	非数字	非数字
	6H	非数字	非数字	非数字	非数字	非数字	非数字	非数字	非数字	非数字	非数字
	8H	非数字	非数字	非数字	非数字	非数字	非数字	非数字	非数字	非数字	非数字
	12H	非数字	非数字	非数字	非数字	非数字	非数字	非数字	非数字	非数字	非数字
8H	4H	非数字	非数字	非数字	非数字	非数字	非数字	非数字	非数字	非数字	非数字
	6H	非数字	非数字	非数字	非数字	非数字	非数字	非数字	非数字	非数字	非数字
	8H	非数字	非数字	非数字	非数字	非数字	非数字	非数字	非数字	非数字	非数字
	12H	非数字	非数字	非数字	非数字	非数字	非数字	非数字	非数字	非数字	非数字
12H	4H	非数字	非数字	非数字	非数字	非数字	非数字	非数字	非数字	非数字	非数字
	6H	非数字	非数字	非数字	非数字	非数字	非数字	非数字	非数字	非数字	非数字
	8H	非数字	非数字	非数字	非数字	非数字	非数字	非数字	非数字	非数字	非数字
Variation with the observer position at spacings:											
S = 1.0H		非数字/非数字					非数字/非数字				
S = 1.5H		非数字/非数字					非数字/非数字				
S = 2.0H		非数字/非数字					非数字/非数字				
Standard tables:		BK0					BK0				
Uncorrected UGR		负无穷大					负无穷大				

UGR calculation is based on CIE Publ. 117 ,S/H = 0.25

Budgetary Estimate Table

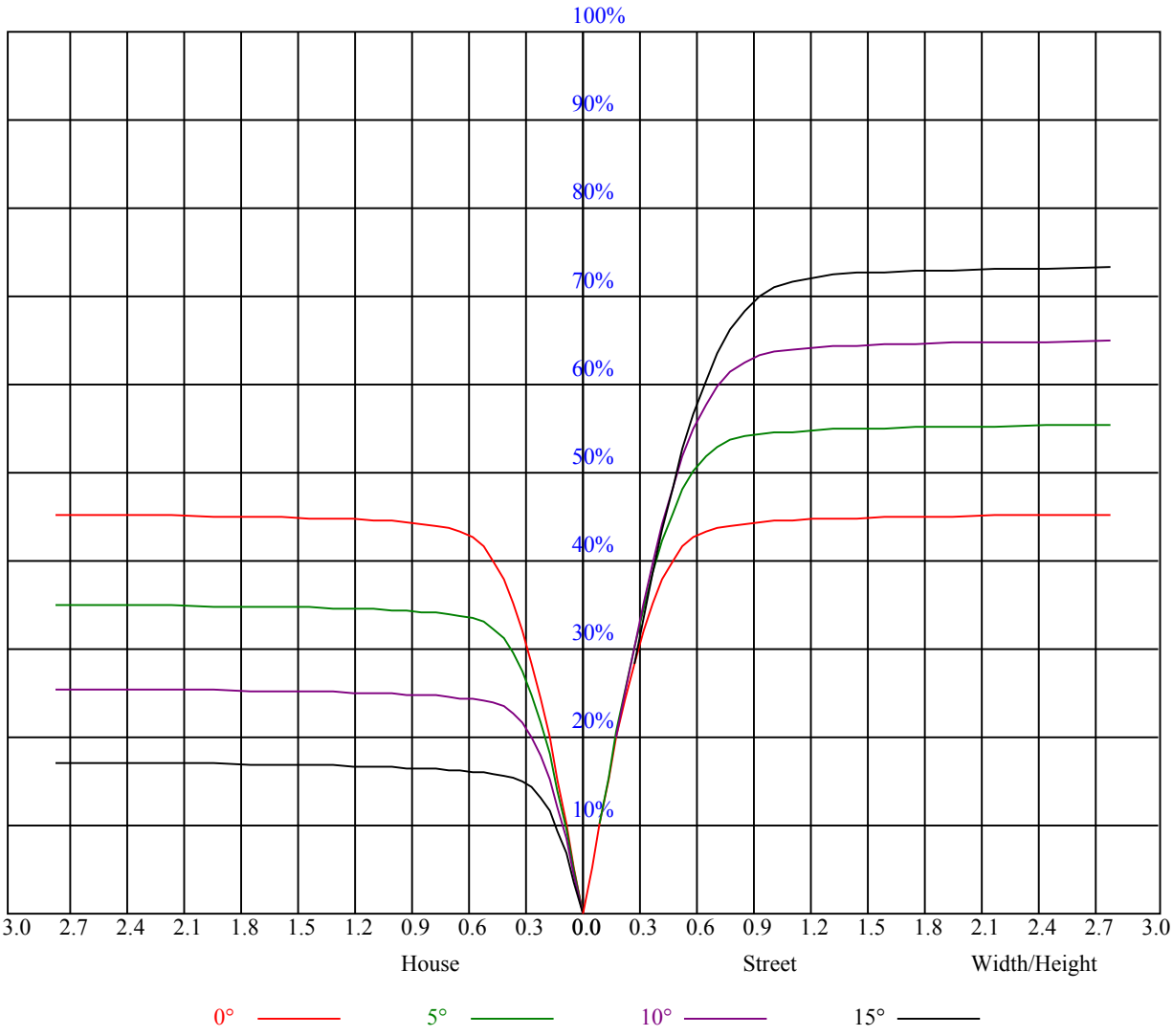


Equipment: GMS1980 Date: 2023/10/16 Operator: NT07
Temperature(°C): 0.0 Humidity(%): 0.0% Distance(m): 7.44

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	1.09	1.09	1.09	1.06	1.06	1.06	1.01	1.01	1.01	0.97	0.97	0.97	0.93	0.93	0.93	0.91
1	1.01	0.99	0.97	0.99	0.97	0.96	0.96	0.94	0.93	0.92	0.91	0.90	0.89	0.88	0.87	0.86
2	0.95	0.91	0.89	0.93	0.90	0.88	0.90	0.88	0.86	0.88	0.86	0.84	0.85	0.84	0.82	0.81
3	0.89	0.85	0.82	0.88	0.84	0.81	0.86	0.83	0.80	0.84	0.81	0.79	0.82	0.79	0.77	0.76
4	0.84	0.80	0.76	0.83	0.79	0.76	0.81	0.78	0.75	0.80	0.77	0.74	0.78	0.75	0.73	0.72
5	0.80	0.75	0.72	0.79	0.75	0.71	0.77	0.74	0.71	0.76	0.73	0.70	0.75	0.72	0.69	0.68
6	0.76	0.71	0.67	0.75	0.71	0.67	0.74	0.70	0.67	0.73	0.69	0.66	0.71	0.68	0.66	0.65
7	0.72	0.67	0.64	0.72	0.67	0.64	0.70	0.66	0.63	0.69	0.66	0.63	0.68	0.65	0.63	0.61
8	0.69	0.64	0.60	0.68	0.64	0.60	0.67	0.63	0.60	0.66	0.63	0.60	0.66	0.62	0.60	0.58
9	0.66	0.61	0.57	0.65	0.61	0.57	0.64	0.60	0.57	0.64	0.60	0.57	0.63	0.59	0.57	0.56
10	0.63	0.58	0.55	0.62	0.58	0.55	0.62	0.57	0.55	0.61	0.57	0.54	0.60	0.57	0.54	0.53

Coefficient Utilization Curve



Equipment: GMS1980	Date: 2023/10/16	Operator: NT07
Temperature(°C): 0.0	Humidity(%): 0.0%	Distance(m): 7.44

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	4029.74	3982.69	3948.93	3910.18	3841.54	3776.78	3721.42	3668.84	3586.91
45.0	4058.53	4047.46	4005.94	3966.09	3904.64	3853.16	3786.19	3707.03	3652.78
90.0	4058.53	4023.10	3978.26	3938.41	3868.66	3806.67	3728.62	3665.52	3605.73
135.0	4058.53	4059.08	4034.72	4001.51	3953.91	3902.43	3822.72	3760.17	3691.53
180.0	4029.74	4060.74	4064.61	4045.79	4006.49	3973.28	3910.18	3849.84	3797.81
225.0	4058.53	4062.95	4039.71	3999.85	3969.41	3912.95	3837.11	3777.88	3724.19
270.0	4058.53	4059.08	4055.76	4036.38	3993.76	3956.12	3905.75	3855.93	3778.44
315.0	4058.53	4041.37	4009.26	3972.17	3936.19	3888.04	3808.88	3748.55	3689.32
360.0	4029.74	3982.69	3948.93	3910.18	3841.54	3776.78	3721.42	3668.84	3586.91

C/γ(°)	9.0	10.0	11.0	12.0	13.0	14.0	15.0	16.0	17.0
0.0	3519.94	3450.19	3357.75	3273.06	3165.67	3067.14	2960.31	2840.75	2694.06
45.0	3588.57	3529.90	3433.03	3355.54	3282.47	3203.31	3117.51	2997.40	2892.78
90.0	3541.52	3453.51	3372.69	3302.40	3223.24	3123.60	3032.27	2930.97	2826.35
135.0	3607.95	3541.52	3461.81	3363.28	3290.22	3198.88	3110.32	2995.18	2901.64
180.0	3724.74	3659.43	3590.23	3526.02	3430.82	3342.25	3257.01	3166.78	3052.20
225.0	3661.09	3589.13	3526.58	3451.85	3357.20	3269.18	3185.05	3067.70	2964.19
270.0	3724.19	3666.07	3602.41	3532.11	3466.24	3376.57	3299.63	3191.14	3100.36
315.0	3613.48	3556.47	3478.42	3409.23	3336.72	3230.44	3149.07	3052.75	2944.26
360.0	3519.94	3450.19	3357.75	3273.06	3165.67	3067.14	2960.31	2840.75	2694.06

C/γ(°)	18.0	19.0	20.0	21.0	22.0	23.0	24.0	25.0	26.0
0.0	2566.75	2432.24	2298.28	2133.33	2005.46	1872.61	1736.44	1554.88	1097.88
45.0	2748.31	2624.31	2506.41	2349.76	2227.98	2102.88	1935.72	1795.12	1640.68
90.0	2685.76	2567.30	2438.88	2280.57	2145.51	1972.25	1822.79	1663.93	1308.01
135.0	2802.55	2695.17	2544.05	2426.70	2308.25	2156.58	2030.37	1855.45	1697.69
180.0	2950.90	2841.85	2693.51	2568.96	2439.99	2275.59	2142.74	2005.46	1832.20
225.0	2815.84	2682.99	2551.25	2413.42	2270.05	2098.45	1965.61	1823.35	1670.02
270.0	2993.52	2882.82	2733.36	2599.41	2463.79	2334.26	2164.88	2032.58	1891.99
315.0	2794.80	2664.17	2530.77	2354.74	2219.68	2082.40	1950.66	1785.71	1636.25
360.0	2566.75	2432.24	2298.28	2133.33	2005.46	1872.61	1736.44	1554.88	1097.88

C/γ(°)	27.0	28.0	29.0	30.0	31.0	32.0	33.0	34.0	35.0
0.0	1097.88	1016.96	855.49	704.49	527.74	401.87	295.31	200.05	155.60
45.0	1476.28	1265.94	1101.54	940.46	783.81	598.93	466.63	351.50	301.68
90.0	1094.12	1094.12	931.55	740.41	598.32	467.74	353.05	244.00	188.59
135.0	1531.63	1352.29	1130.87	962.60	799.86	648.74	478.26	361.46	288.95
180.0	1687.73	1518.35	1343.43	1120.36	946.55	782.15	631.03	466.63	354.26
225.0	1461.89	1082.38	1082.38	913.50	755.80	608.23	443.27	331.51	226.51
270.0	1693.82	1526.10	1352.29	1135.30	964.81	798.20	603.91	466.08	348.17
315.0	1472.96	1082.33	1082.33	912.28	711.57	564.50	432.20	320.22	213.72
360.0	1097.88	1016.96	855.49	704.49	527.74	401.87	295.31	200.05	155.60

C/γ(°)	36.0	37.0	38.0	39.0	40.0	41.0	42.0	43.0	44.0
0.0	129.47	110.82	93.55	82.81	73.68	66.31	58.51	53.64	48.38
45.0	301.68	136.67	115.91	100.58	88.51	76.28	68.20	61.44	55.96
90.0	155.10	131.13	109.32	96.15	82.86	73.95	66.48	58.84	53.69
135.0	288.95	154.55	130.14	108.60	95.43	84.58	73.29	65.87	59.89
180.0	282.86	282.86	154.05	126.54	110.54	97.64	86.91	75.67	68.36
225.0	177.19	148.46	126.76	110.32	94.38	83.86	75.28	66.48	60.67
270.0	298.36	298.36	150.34	127.48	110.76	94.21	83.69	74.89	66.04
315.0	163.02	134.51	114.53	95.65	84.41	74.89	65.37	59.12	54.19
360.0	129.47	110.82	93.55	82.81	73.68	66.31	58.51	53.64	48.38

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	44.95	41.90	38.64	36.37	34.26	31.99	30.39	28.89	27.57
45.0	50.37	46.55	43.29	39.69	37.20	34.87	32.38	30.78	29.34
90.0	49.26	45.56	41.63	38.91	36.53	34.37	32.05	30.33	28.84
135.0	54.91	49.71	46.11	42.95	40.19	37.14	34.98	33.21	31.22
180.0	62.38	57.35	52.09	48.38	45.11	42.18	39.02	36.81	34.26
225.0	55.74	50.54	46.88	43.67	40.19	37.70	35.48	33.05	31.27
270.0	60.28	55.41	50.21	46.55	43.45	39.97	37.53	35.26	33.32
315.0	49.04	45.50	41.79	39.25	36.87	34.76	32.49	30.78	29.34
360.0	44.95	41.90	38.64	36.37	34.26	31.99	30.39	28.89	27.57

C/γ(°)	54.0	55.0	56.0	57.0	58.0	59.0	60.0	61.0	62.0
0.0	26.13	25.08	24.08	23.25	22.25	21.59	20.92	20.20	19.65
45.0	27.62	26.40	25.30	24.36	23.25	22.47	21.70	20.92	20.31
90.0	27.12	25.96	24.63	23.69	22.86	22.09	21.20	20.59	20.04
135.0	29.78	28.40	26.90	25.85	24.69	23.86	23.08	22.31	21.48
180.0	32.49	30.89	29.12	27.90	26.74	25.52	24.58	23.75	22.97
225.0	29.78	28.40	26.85	25.74	24.80	23.86	22.81	22.09	21.42
270.0	31.11	29.61	28.23	26.96	25.57	24.63	23.53	22.69	21.92
315.0	28.01	26.51	25.46	24.47	23.64	22.64	21.92	21.09	20.48
360.0	26.13	25.08	24.08	23.25	22.25	21.59	20.92	20.20	19.65

C/γ(°)	63.0	64.0	65.0	66.0	67.0	68.0	69.0	70.0	71.0
0.0	19.04	18.54	18.10	17.66	17.16	16.77	16.33	16.00	15.50
45.0	19.76	19.26	18.65	18.21	17.77	17.16	16.83	16.33	15.94
90.0	19.48	18.88	18.38	17.93	17.38	16.94	16.55	16.05	15.72
135.0	20.87	20.26	19.71	19.21	18.60	18.05	17.60	16.99	16.55
180.0	21.98	21.31	20.65	20.04	19.26	18.76	18.21	17.55	17.10
225.0	20.59	19.98	19.26	18.71	18.21	17.71	17.10	16.66	16.27
270.0	21.03	20.43	19.87	19.15	18.65	18.10	17.60	17.10	16.61
315.0	19.87	19.21	18.71	18.27	17.77	17.27	16.88	16.50	16.11
360.0	19.04	18.54	18.10	17.66	17.16	16.77	16.33	16.00	15.50

C/γ(°)	72.0	73.0	74.0	75.0	76.0	77.0	78.0	79.0	80.0
0.0	15.17	14.83	14.39	14.06	13.73	13.28	13.01	12.62	12.23
45.0	15.61	15.22	14.72	14.45	14.12	13.73	13.34	13.01	12.68
90.0	15.33	14.89	14.50	14.17	13.73	13.40	13.06	12.73	12.29
135.0	16.05	15.61	15.22	14.67	14.28	13.84	13.51	13.01	12.73
180.0	16.50	16.05	15.67	15.22	14.67	14.28	13.89	13.51	13.01
225.0	15.83	15.33	14.95	14.56	14.12	13.67	13.28	12.84	12.57
270.0	16.22	15.78	15.28	14.89	14.50	14.00	13.62	13.28	12.84
315.0	15.61	15.28	14.89	14.45	14.06	13.62	13.23	12.90	12.51
360.0	15.17	14.83	14.39	14.06	13.73	13.28	13.01	12.62	12.23

C/γ(°)	81.0	82.0	83.0	84.0	85.0	86.0	87.0	88.0	89.0
0.0	11.96	11.62	11.40	11.13	10.85	10.63	10.41	10.19	10.02
45.0	12.40	12.01	11.68	11.40	11.07	10.79	10.57	10.41	10.19
90.0	12.01	11.68	11.40	11.13	10.79	10.63	10.35	10.13	9.85
135.0	12.40	12.01	11.68	11.40	11.07	10.85	10.68	10.41	9.96
180.0	12.73	12.29	12.01	11.73	11.40	11.13	10.96	10.63	10.52
225.0	12.23	11.90	11.62	11.35	11.13	10.90	10.63	10.35	10.07
270.0	12.51	12.12	11.79	11.51	11.24	11.02	10.74	10.52	10.30
315.0	12.18	11.90	11.57	11.24	11.02	10.79	10.57	10.35	10.02
360.0	11.96	11.62	11.40	11.13	10.85	10.63	10.41	10.19	10.02

Intensity data(cd)

C/γ(°)	90.0
0.0	9.96
45.0	9.91
90.0	9.91
135.0	10.07
180.0	10.24
225.0	10.35
270.0	10.02
315.0	9.91
360.0	9.96