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NATA

Client:
LumCAT: 2-2643-L
Luminaire: 92.70.411.00
Report No: 20231016-B009
Ballast type: AC

Test No: 20231016-C009	Voltage(V): 34.220
LampCAT: NICHIA NFCWJ108B-V3	Current(A): 0.576
Lamp flux(lm): 2574.8	Power (W): 19.710
Number of Lamps: 1	PF: 0.000
Length(mm): 0	Width(mm): 0
Phm Type: C	Height(mm): 0

Photometric Results

Lumens(lm): 2440.97, Efficiency(%): 94.80% , Luminous Efficacy(lm/W): 123.84
Central intensity(cd): 12822.660, Maximum intensity(cd): 12822.660
Angle of maximum intensity: C=0.0 γ=0.0
Beam Angle(50%Imax): [C0/180]Total=18.2
[C90/270]Total=18.2
Field angle(10%Imax): [C0/180]Total=46.4
[C90/270]Total=46.4
Maximum s/h(1/2): C0_180=0.31 C90_270=0.31
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(%): 94.80%
Up flux rate of LUM(%): - -
Down flux rate of LUM(%): 100.00%
CIE Type : Direct lighting
Output flux ratio in π solid angle : 98.117%

Zonal flux distribution table

γ(°)	Average I(cd)	Zonal F(lm)	Sum F(lm)	Eff Flux(%)	Eff Sum(%)
0.0	12822.661	0.000	0	0.00%	0.00%
1.0	12649.681	12.188	12.188	0.47%	0.50%
2.0	12125.690	35.560	47.748	1.38%	1.96%
3.0	11558.731	56.645	104.393	2.20%	4.28%
4.0	11000.836	75.514	179.907	2.93%	7.37%
5.0	10227.892	91.325	271.232	3.55%	11.11%
6.0	9320.024	102.729	373.962	3.99%	15.32%
7.0	8394.443	109.953	483.915	4.27%	19.82%
8.0	7381.818	112.908	596.823	4.39%	24.45%
9.0	6491.524	112.436	709.259	4.37%	29.06%
10.0	5608.219	109.498	818.757	4.25%	33.54%
11.0	4889.038	104.889	923.646	4.07%	37.84%
12.0	4252.264	99.928	1023.574	3.88%	41.93%
13.0	3701.357	94.389	1117.963	3.67%	45.80%
14.0	3253.823	89.026	1206.989	3.46%	49.45%
15.0	2909.108	84.607	1291.596	3.29%	52.91%
16.0	2651.853	81.484	1373.08	3.16%	56.25%
17.0	2512.223	80.419	1453.498	3.12%	59.55%
18.0	2186.536	77.472	1530.971	3.01%	62.72%
19.0	1947.962	71.932	1602.903	2.79%	65.67%
20.0	1770.001	68.049	1670.952	2.64%	68.45%
21.0	1610.582	64.914	1735.866	2.52%	71.11%
22.0	1458.983	61.684	1797.55	2.40%	73.64%
23.0	1299.841	57.888	1855.437	2.25%	76.01%
24.0	1189.888	54.434	1909.872	2.11%	78.24%
25.0	1107.785	52.244	1962.116	2.03%	80.38%
26.0	999.658	49.746	2011.862	1.93%	82.42%
27.0	889.546	46.220	2058.082	1.80%	84.31%
28.0	785.779	42.416	2100.498	1.65%	86.05%
29.0	688.862	38.581	2139.079	1.50%	87.63%
30.0	585.952	34.420	2173.498	1.34%	89.04%
31.0	501.704	30.268	2203.766	1.18%	90.28%
32.0	424.638	26.539	2230.305	1.03%	91.37%
33.0	355.135	22.972	2253.277	0.89%	92.31%
34.0	290.101	19.527	2272.804	0.76%	93.11%
35.0	247.057	16.682	2289.486	0.65%	93.79%
36.0	219.442	14.853	2304.34	0.58%	94.40%
37.0	158.304	12.320	2316.66	0.48%	94.91%

Zonal flux distribution table

γ(°)	Average I(cd)	Zonal F(lm)	Sum F(lm)	Eff Flux(%)	Eff Sum(%)
38.0	124.283	9.432	2326.092	0.37%	95.29%
39.0	100.771	7.682	2333.774	0.30%	95.61%
40.0	83.964	6.443	2340.217	0.25%	95.87%
41.0	69.220	5.455	2345.671	0.21%	96.10%
42.0	58.965	4.657	2350.329	0.18%	96.29%
43.0	50.351	4.049	2354.378	0.16%	96.45%
44.0	44.490	3.580	2357.958	0.14%	96.60%
45.0	39.938	3.245	2361.202	0.13%	96.73%
46.0	36.547	2.991	2364.193	0.12%	96.85%
47.0	33.447	2.784	2366.977	0.11%	96.97%
48.0	31.095	2.609	2369.586	0.10%	97.08%
49.0	29.088	2.471	2372.058	0.10%	97.18%
50.0	27.352	2.353	2374.411	0.09%	97.27%
51.0	25.933	2.254	2376.665	0.09%	97.37%
52.0	24.750	2.175	2378.84	0.08%	97.45%
53.0	23.802	2.112	2380.952	0.08%	97.54%
54.0	22.937	2.060	2383.012	0.08%	97.63%
55.0	22.342	2.021	2385.033	0.08%	97.71%
56.0	21.851	1.997	2387.03	0.08%	97.79%
57.0	21.546	1.984	2389.015	0.08%	97.87%
58.0	21.373	1.985	2390.999	0.08%	97.95%
59.0	21.339	1.997	2392.996	0.08%	98.03%
60.0	21.353	2.017	2395.013	0.08%	98.12%
61.0	21.290	2.035	2397.048	0.08%	98.20%
62.0	21.235	2.049	2399.097	0.08%	98.28%
63.0	21.034	2.056	2401.153	0.08%	98.37%
64.0	20.536	2.040	2403.193	0.08%	98.45%
65.0	19.844	1.998	2405.191	0.08%	98.53%
66.0	19.104	1.943	2407.135	0.08%	98.61%
67.0	18.170	1.874	2409.009	0.07%	98.69%
68.0	17.319	1.798	2410.807	0.07%	98.76%
69.0	16.571	1.729	2412.535	0.07%	98.84%
70.0	15.935	1.669	2414.205	0.06%	98.90%
71.0	15.354	1.617	2415.822	0.06%	98.97%
72.0	14.883	1.572	2417.394	0.06%	99.03%
73.0	14.482	1.536	2418.93	0.06%	99.10%
74.0	14.129	1.504	2420.434	0.06%	99.16%
75.0	13.818	1.477	2421.911	0.06%	99.22%

Zonal flux distribution table

γ(°)	Average I(cd)	Zonal F(lm)	Sum F(lm)	Eff Flux(%)	Eff Sum(%)
76.0	13.486	1.449	2423.36	0.06%	99.28%
77.0	13.202	1.423	2424.783	0.06%	99.34%
78.0	12.884	1.396	2426.179	0.05%	99.39%
79.0	12.614	1.370	2427.549	0.05%	99.45%
80.0	12.295	1.343	2428.892	0.05%	99.51%
81.0	12.019	1.315	2430.207	0.05%	99.56%
82.0	11.721	1.287	2431.494	0.05%	99.61%
83.0	11.458	1.260	2432.754	0.05%	99.66%
84.0	11.209	1.235	2433.989	0.05%	99.71%
85.0	10.981	1.211	2435.2	0.05%	99.76%
86.0	10.787	1.190	2436.39	0.05%	99.81%
87.0	10.600	1.170	2437.561	0.05%	99.86%
88.0	10.413	1.151	2438.712	0.04%	99.91%
89.0	10.268	1.134	2439.845	0.04%	99.95%
90.0	10.178	1.121	2440.966	0.04%	100.00%

Zonal flux distribution table

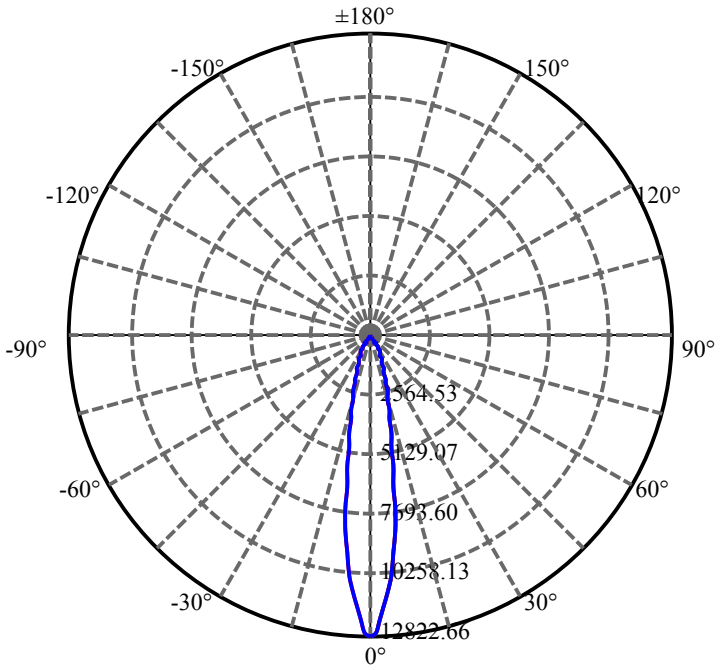
ZONAL LUMEN SUMMARY

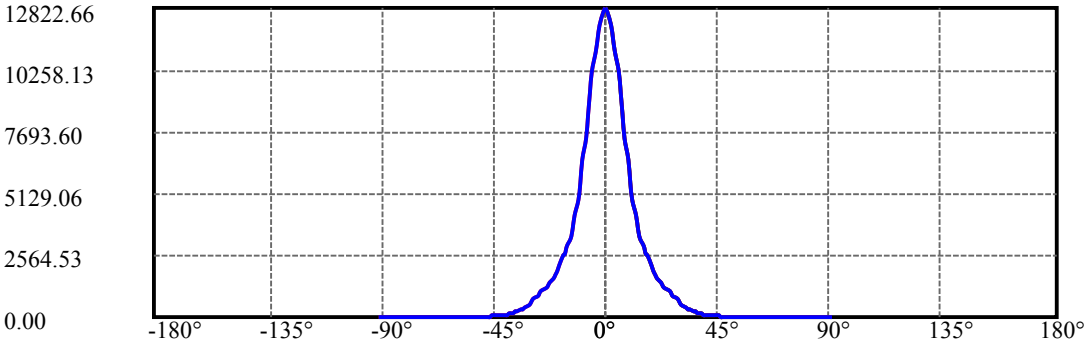
Zone	Lumens	%Lamp	%Fixt
0-30	2173.50	84.41%	89.04%
0-40	2340.22	90.89%	95.87%
0-60	2395.01	93.02%	98.12%
0-90	2439.85	94.76%	99.95%
0-120	2439.85	94.76%	99.95%
0-180	2440.97	94.80%	100.00%
60-90	44.83	1.74%	1.84%
90-120	0.00	0.00%	0.00%
90-130	0.00	0.00%	0.00%
90-150	0.00	0.00%	0.00%
90-180	0.00	0.00%	0.00%
0-24.82	1952.77	75.84%	80.00%

ZONAL LUMEN SUMMARY

0-10	818.76
10-20	852.19
20-30	502.55
30-40	166.72
40-50	34.19
50-60	20.60
60-70	19.19
70-80	14.69
80-90	10.95
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:23.2 Right:23.2
:C90/270Left:23.2 Right:23.2

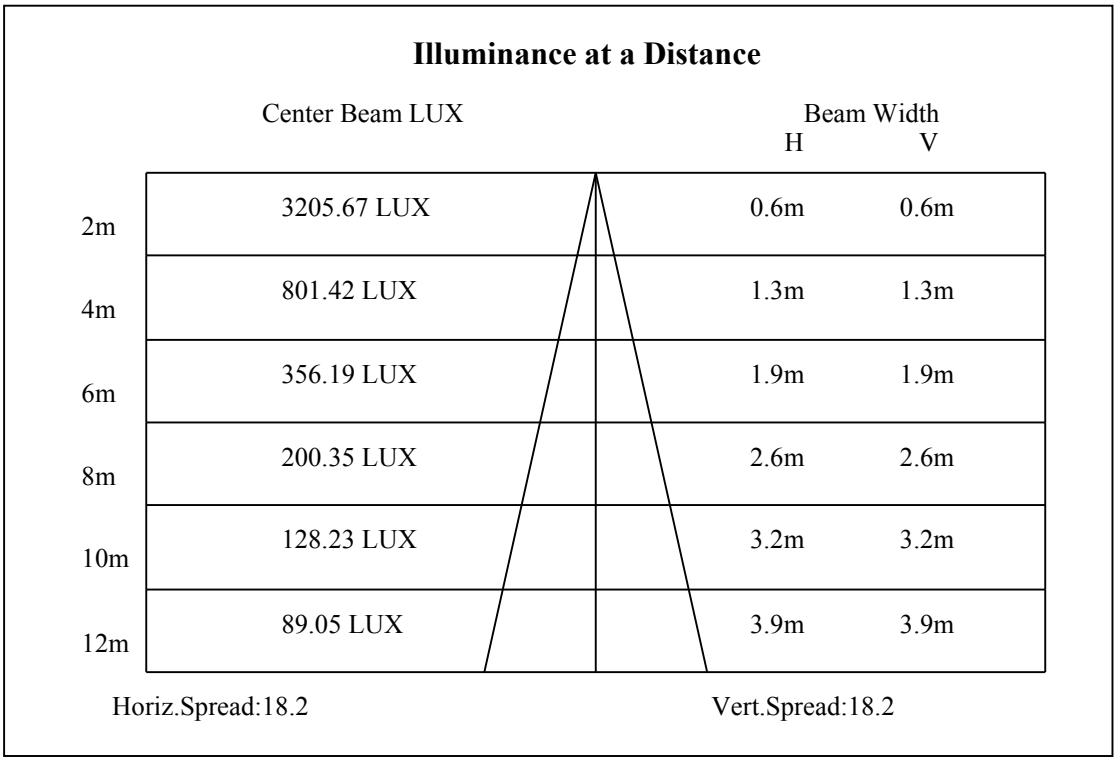
Beam Angle(50%Imax):C0/180Left:9.1 Right:9.1
:C90/270Left:9.1 Right:9.1

Equipment: GMS1980
Temperature(°C): 0.0

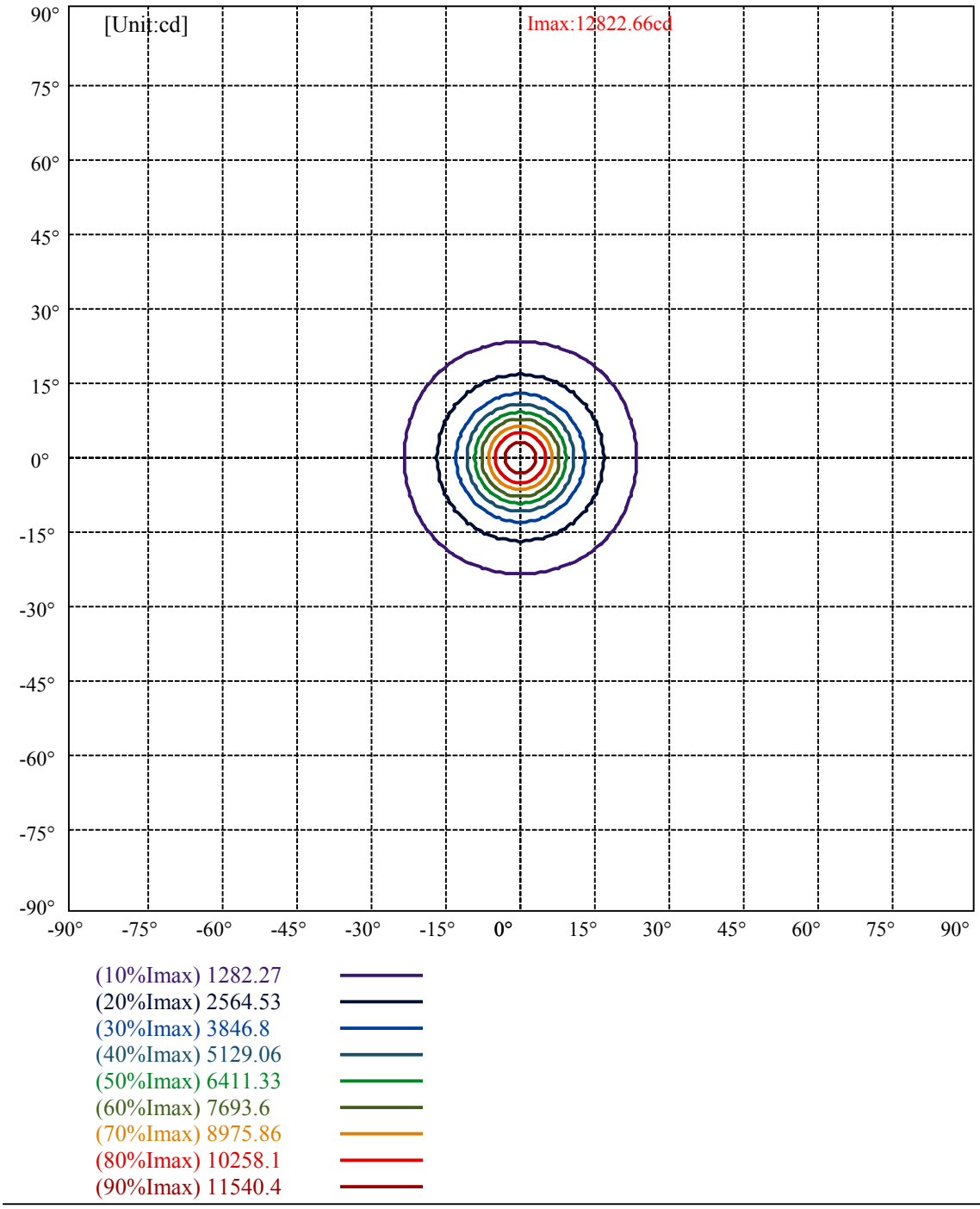
Date: 2023/10/16
Humidity(%): 0.0%

Operator: NT07
Distance(m): 7.44

Lux distance Curve



ISO-Intensity(V-H)

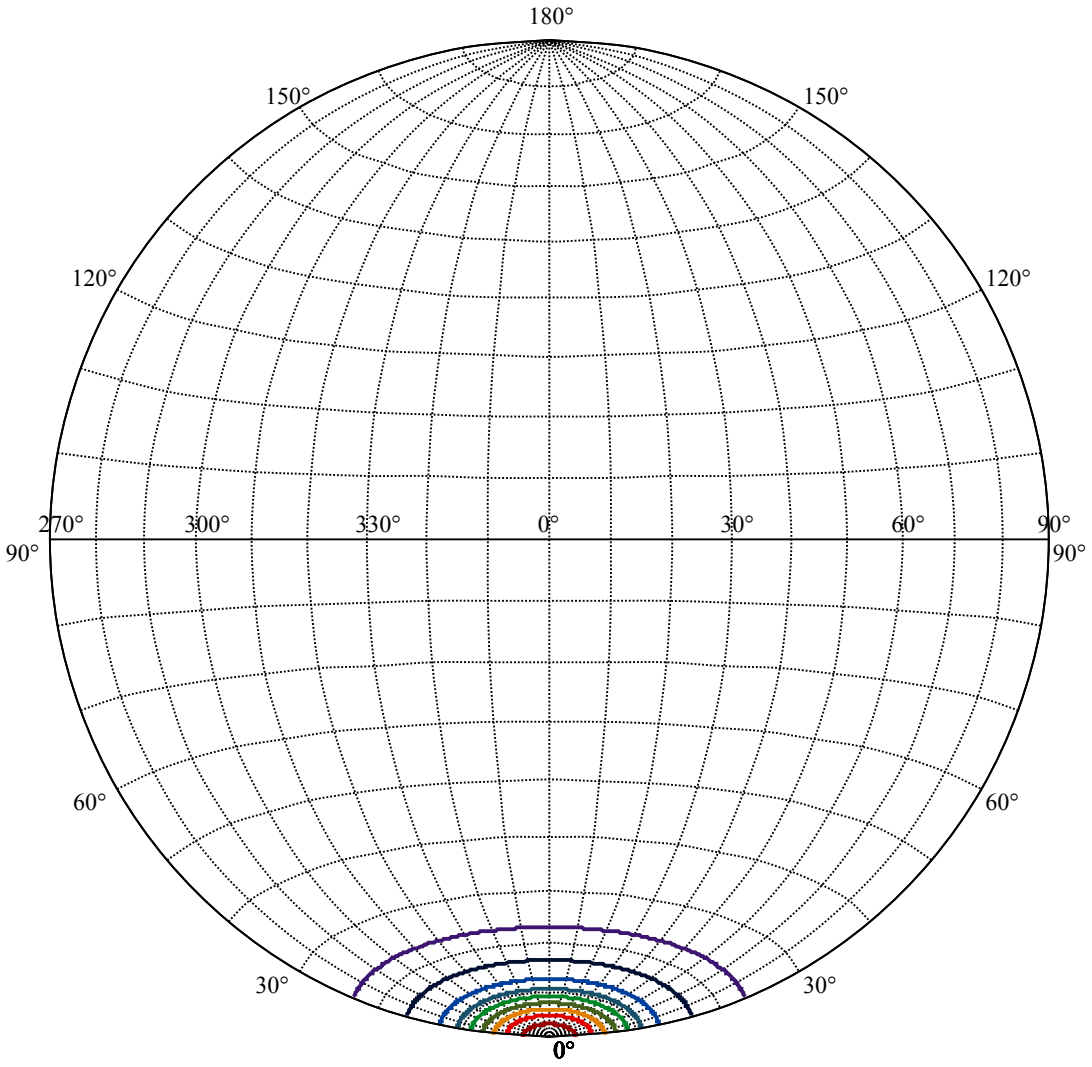


Equipment: GMS1980
Temperature(°C): 0.0

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

Operator: NT07
Distance(m): 7.44

ISO candela diagram on circular web

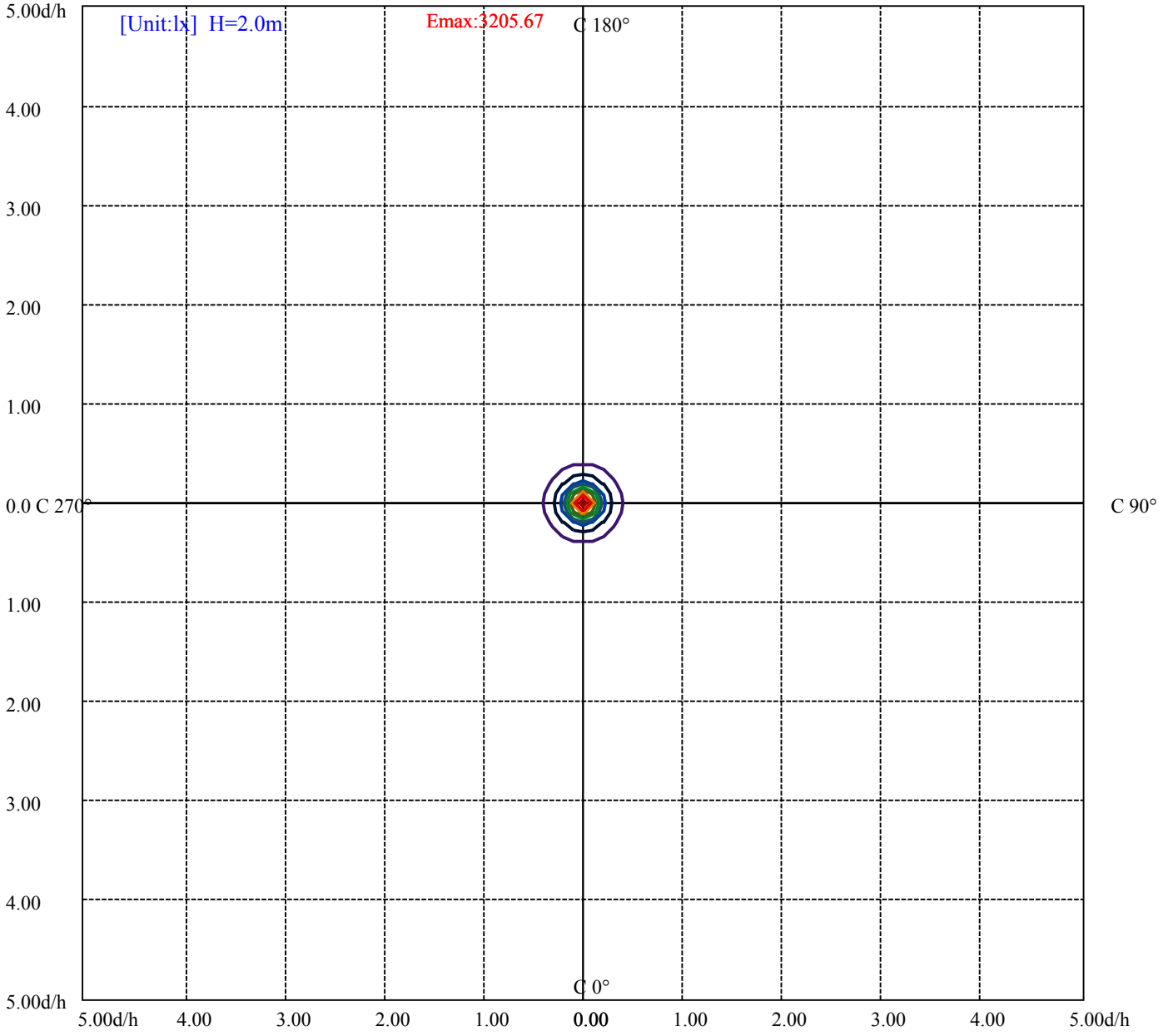


House [Unit:cd] Road

Imax:12822.66

(10%Imax) 1282.27
(20%Imax) 2564.53
(30%Imax) 3846.8
(40%Imax) 5129.06
(50%Imax) 6411.33
(60%Imax) 7693.6
(70%Imax) 8975.86
(80%Imax) 10258.1
(90%Imax) 11540.4

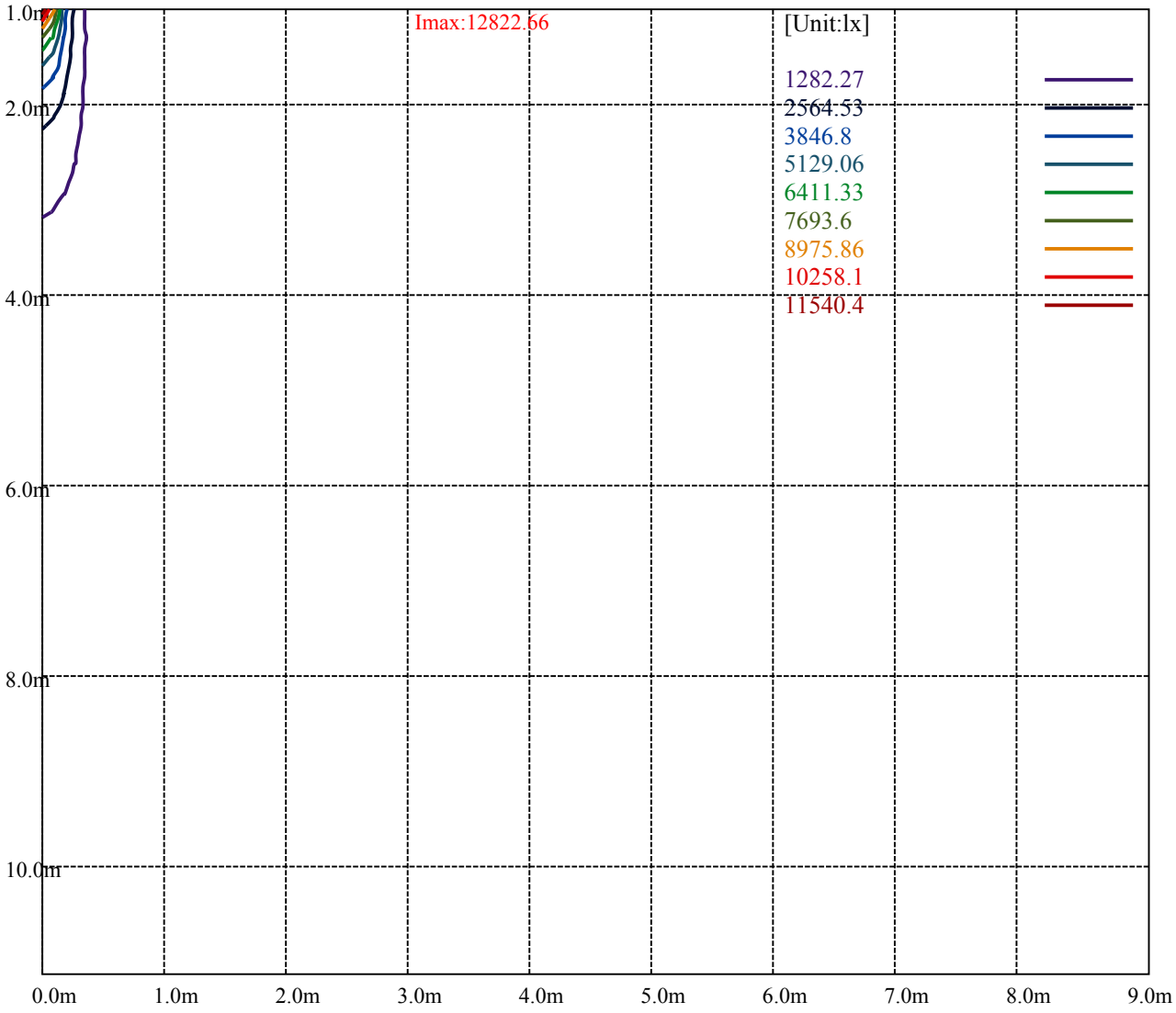
ISO illuminance diagram



(10%Emax) 320.565
(20%Emax) 641.1325
(30%Emax) 961.6975
(40%Emax) 1282.262
(50%Emax) 1602.83
(60%Emax) 1923.395
(70%Emax) 2243.96
(80%Emax) 2564.525
(90%Emax) 2885.1

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

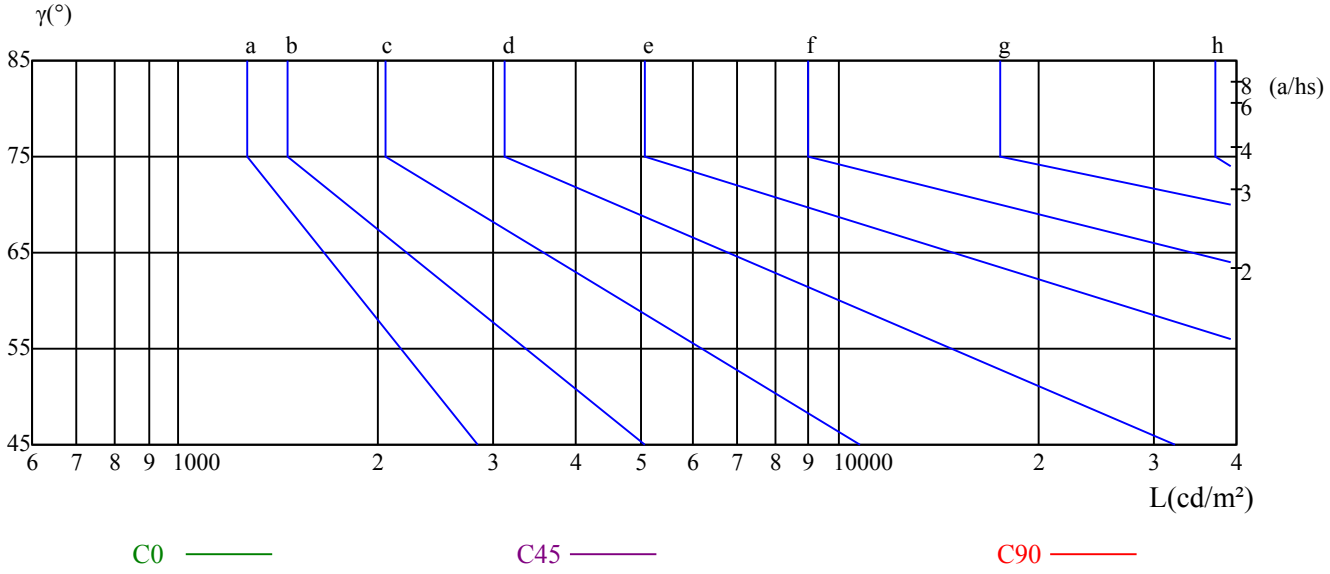
γ	45	50	55	60	65	70	75	80	85
C0	0	0	0	0	0	0	0	0	0
C45	0	0	0	0	0	0	0	0	0
C90	0	0	0	0	0	0	0	0	0

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

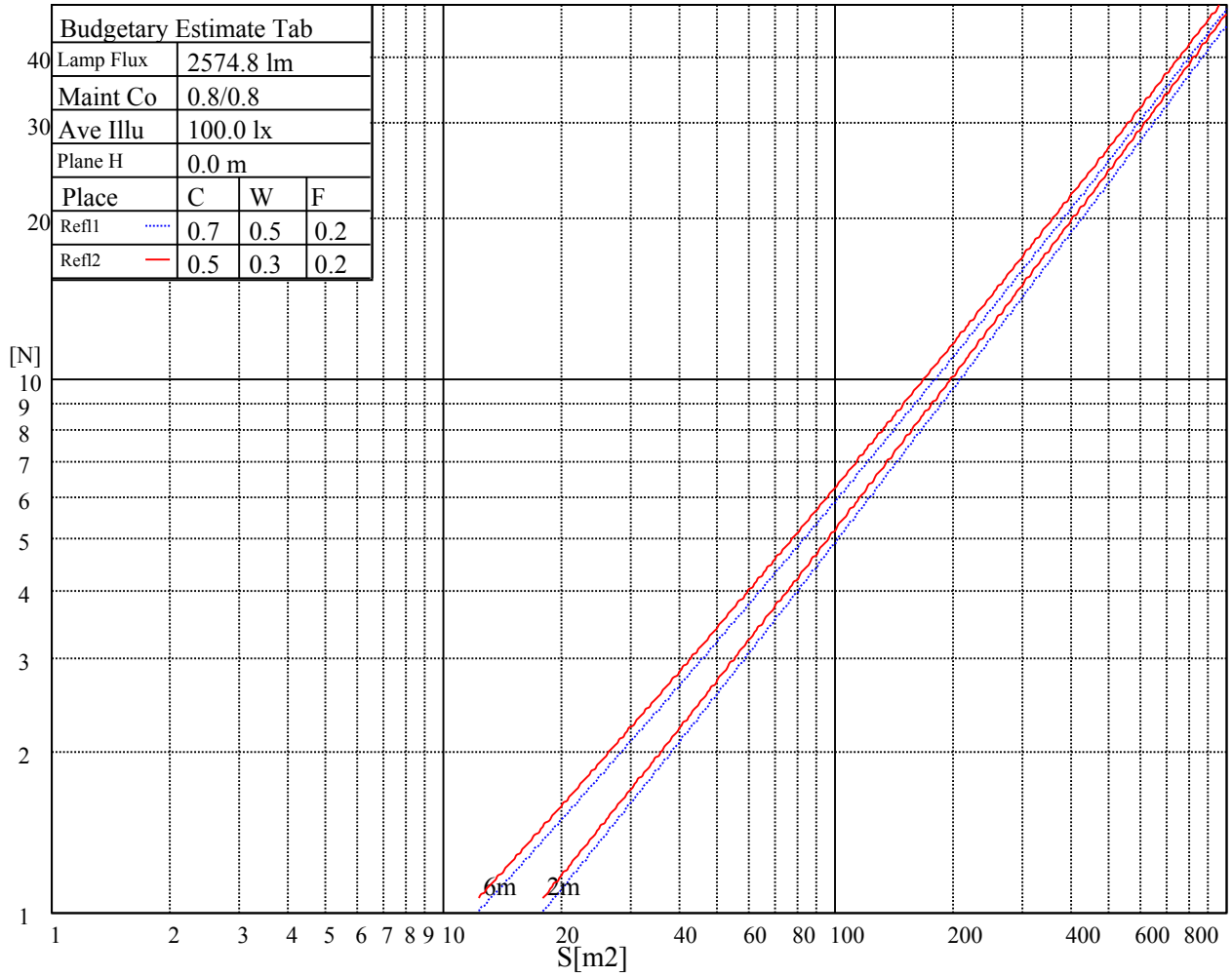
Luminance Limitting Curve



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

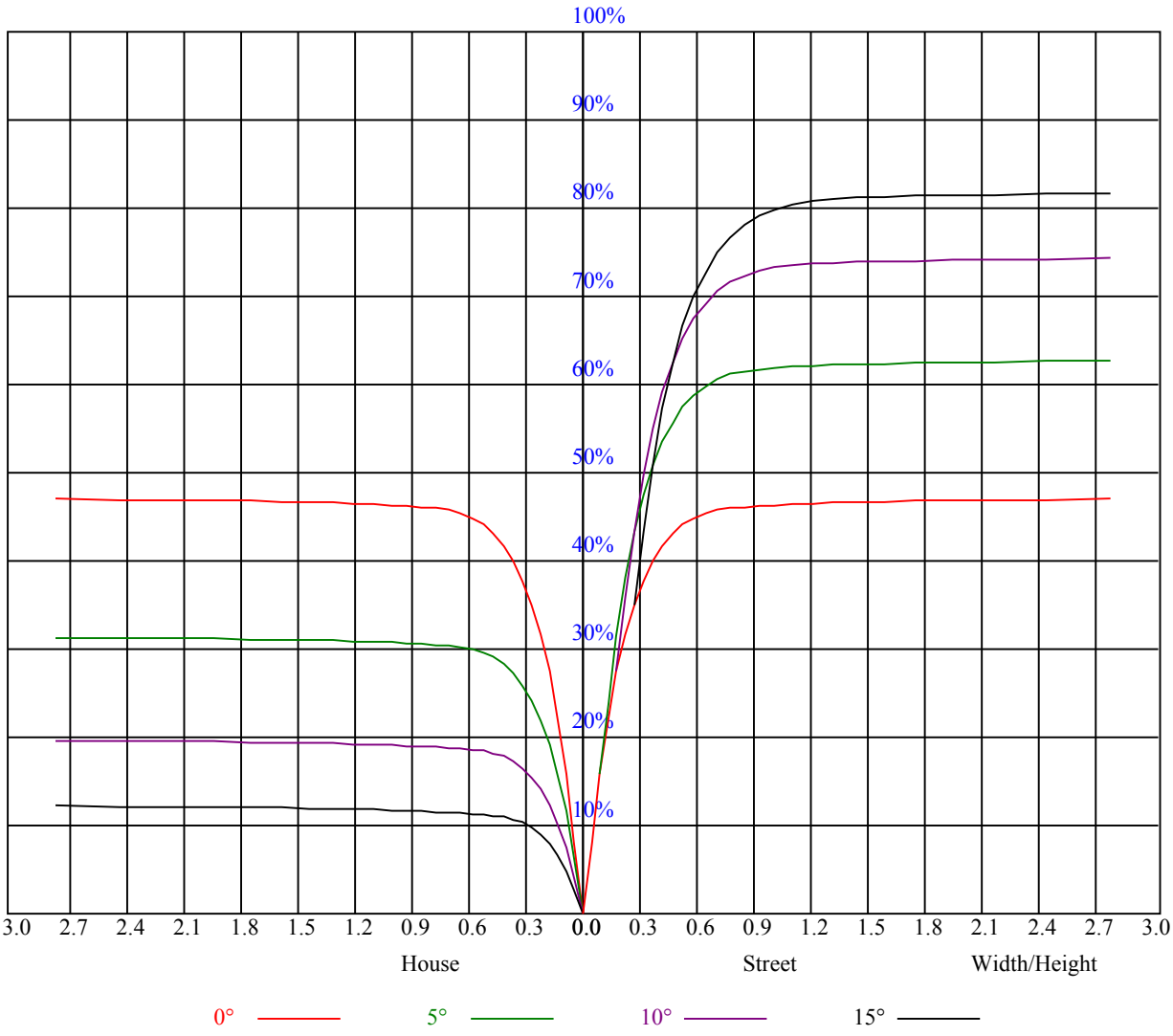


Equipment: GMS1980 Date: 2023/10/16 Operator: NT07
Temperature(°C): 0.0 Humidity(%): 0.0% Distance(m): 7.44

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	1.13	1.13	1.13	1.10	1.10	1.10	1.05	1.05	1.05	1.01	1.01	1.01	0.97	0.97	0.97	0.95
1	1.06	1.04	1.02	1.04	1.02	1.01	1.00	0.99	0.98	0.97	0.96	0.95	0.94	0.93	0.92	0.90
2	1.01	0.97	0.95	0.99	0.96	0.94	0.96	0.94	0.92	0.93	0.91	0.90	0.91	0.89	0.88	0.86
3	0.96	0.92	0.89	0.94	0.91	0.88	0.92	0.89	0.87	0.90	0.87	0.85	0.88	0.86	0.84	0.83
4	0.91	0.87	0.84	0.90	0.87	0.84	0.88	0.85	0.83	0.87	0.84	0.82	0.85	0.83	0.81	0.80
5	0.88	0.83	0.80	0.87	0.83	0.80	0.85	0.82	0.79	0.84	0.81	0.78	0.82	0.80	0.78	0.77
6	0.84	0.80	0.77	0.84	0.79	0.76	0.82	0.79	0.76	0.81	0.78	0.75	0.80	0.77	0.75	0.74
7	0.81	0.77	0.74	0.81	0.76	0.74	0.79	0.76	0.73	0.78	0.75	0.73	0.78	0.75	0.72	0.71
8	0.78	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
9	0.76	0.72	0.69	0.75	0.71	0.69	0.75	0.71	0.68	0.74	0.71	0.68	0.73	0.70	0.68	0.67
10	0.73	0.69	0.67	0.73	0.69	0.66	0.72	0.69	0.66	0.72	0.68	0.66	0.71	0.68	0.66	0.65

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	12681.51	11917.63	10934.55	10934.55	9914.38	9037.58	8150.82	7245.79	6165.28
45.0	12891.85	12786.68	12354.92	11845.67	11004.30	10229.35	9354.76	8469.10	7350.96
90.0	12808.82	12426.88	10906.32	10906.32	10308.50	9443.88	8326.84	7428.45	6554.97
135.0	12908.46	12803.29	12476.70	11984.05	11164.82	10356.66	9493.14	8590.88	7450.59
180.0	12681.51	12880.78	12864.18	12515.45	12006.20	11198.03	10417.55	9542.96	8635.16
225.0	12891.85	12781.15	12354.92	10940.09	10940.09	10336.18	9245.16	8321.31	7390.81
270.0	12808.82	12897.39	12764.54	12393.67	11718.36	11048.58	10268.09	9399.04	8269.83
315.0	12908.46	12703.65	12349.39	10950.05	10950.05	10172.88	9303.83	8158.01	7236.93
360.0	12681.51	11917.63	10934.55	10934.55	9914.38	9037.58	8150.82	7245.79	6165.28

C/γ(°)	9.0	10.0	11.0	12.0	13.0	14.0	15.0	16.0	17.0
0.0	5401.96	4720.56	4144.88	3535.43	3151.83	2835.76	2504.75	2284.44	2050.85
45.0	6481.91	5690.35	4843.44	4251.16	3747.44	3326.75	2983.56	2834.10	2834.10
90.0	5759.54	4884.40	4281.60	3776.78	3361.07	2935.95	2652.54	2407.88	2157.13
135.0	6576.01	5607.32	4920.94	4328.65	3697.62	3293.54	2972.49	2823.03	2823.03
180.0	7483.81	6609.22	5778.92	5042.71	4267.76	3747.44	3315.68	2894.99	2823.03
225.0	6500.73	5475.58	4769.27	4175.32	3681.01	3178.96	2850.16	2577.82	2296.62
270.0	7373.10	6509.58	5684.81	4793.62	4184.73	3570.31	3171.76	2839.64	2839.64
315.0	6355.15	5368.75	4688.45	4114.43	3519.38	3141.87	2821.93	2552.91	2273.37
360.0	5401.96	4720.56	4144.88	3535.43	3151.83	2835.76	2504.75	2284.44	2050.85

C/γ(°)	18.0	19.0	20.0	21.0	22.0	23.0	24.0	25.0	26.0
0.0	1884.24	1728.14	1585.33	1428.12	1233.28	1096.61	1096.61	968.91	865.95
45.0	2138.31	1958.96	1792.35	1606.92	1473.51	1352.84	1211.14	1105.96	1001.35
90.0	1974.46	1807.30	1618.54	1482.37	1362.25	1087.09	1087.09	1013.52	892.85
135.0	2195.88	2017.64	1852.13	1658.95	1519.46	1395.46	1280.88	1140.84	1035.11
180.0	2823.03	2190.90	1965.61	1808.40	1617.99	1479.60	1362.81	1254.87	1121.46
225.0	2103.99	1887.00	1729.80	1585.33	1454.14	1231.06	1099.05	1099.05	1000.24
270.0	2291.64	2094.58	1875.38	1715.96	1571.49	1432.55	1293.06	1190.66	1089.36
315.0	2080.74	1899.18	1740.87	1598.61	1439.75	1323.50	1088.47	1088.47	990.94
360.0	1884.24	1728.14	1585.33	1428.12	1233.28	1096.61	1096.61	968.91	865.95

C/γ(°)	27.0	28.0	29.0	30.0	31.0	32.0	33.0	34.0	35.0
0.0	762.72	665.90	555.36	475.99	402.86	321.38	265.31	217.37	167.61
45.0	901.16	776.61	683.06	595.05	515.34	424.01	358.69	301.68	288.39
90.0	793.49	697.57	608.11	508.59	438.62	373.53	314.63	251.42	208.24
135.0	904.48	804.84	708.53	597.27	517.00	444.49	364.23	306.66	280.09
180.0	1022.93	922.74	822.00	699.67	604.46	521.98	445.60	361.46	300.02
225.0	877.96	780.32	684.45	571.47	490.82	417.75	336.77	279.70	220.09
270.0	984.74	865.73	771.63	674.21	558.52	482.13	410.72	329.35	287.29
315.0	868.89	772.51	677.75	565.38	486.00	411.83	345.13	273.17	224.74
360.0	762.72	665.90	555.36	475.99	402.86	321.38	265.31	217.37	167.61

C/γ(°)	36.0	37.0	38.0	39.0	40.0	41.0	42.0	43.0	44.0
0.0	136.61	111.70	87.74	74.01	63.27	54.80	46.77	41.90	38.14
45.0	228.28	159.20	124.77	103.18	86.41	69.91	59.39	51.64	45.56
90.0	172.15	135.56	111.32	87.46	72.40	60.89	52.36	44.95	40.57
135.0	280.09	163.02	133.46	109.32	89.84	71.07	59.89	51.53	44.12
180.0	286.73	225.12	155.32	121.39	100.13	83.58	70.80	58.40	50.87
225.0	180.62	148.40	122.17	96.98	81.43	68.86	58.73	49.15	43.90
270.0	287.29	172.81	141.82	116.63	96.70	77.94	66.42	56.96	49.76
315.0	183.77	150.62	117.68	97.20	81.54	66.70	57.35	48.27	43.01
360.0	136.61	111.70	87.74	74.01	63.27	54.80	46.77	41.90	38.14

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	35.15	32.05	29.95	27.90	26.51	25.35	24.13	23.30	22.58
45.0	40.19	36.92	34.15	31.94	29.56	27.95	26.63	25.24	24.30
90.0	37.14	34.43	31.61	29.72	28.17	26.85	25.52	24.58	23.80
135.0	39.91	36.59	33.27	31.00	29.01	26.96	25.68	24.63	23.80
180.0	45.06	40.57	36.42	33.65	31.33	28.84	27.23	25.85	24.36
225.0	39.85	36.59	33.32	31.11	28.73	27.18	25.79	24.36	23.47
270.0	43.23	39.41	36.31	33.10	30.89	28.67	27.07	25.74	24.63
315.0	38.97	35.81	32.55	30.33	28.51	27.01	25.41	24.30	23.47
360.0	35.15	32.05	29.95	27.90	26.51	25.35	24.13	23.30	22.58

C/γ(°)	54.0	55.0	56.0	57.0	58.0	59.0	60.0	61.0	62.0
0.0	21.86	21.42	21.09	20.87	20.87	20.92	20.81	20.70	20.70
45.0	23.36	22.69	22.14	21.70	21.48	21.42	21.48	21.37	21.31
90.0	23.03	22.64	22.09	21.86	21.86	22.03	21.86	21.81	21.75
135.0	22.92	22.36	21.92	21.64	21.42	21.42	21.53	21.48	21.42
180.0	23.41	22.53	21.92	21.53	21.20	20.92	20.87	20.87	20.87
225.0	22.69	22.14	21.64	21.37	21.20	21.20	21.31	21.26	21.20
270.0	23.53	22.81	22.31	21.98	21.64	21.53	21.59	21.64	21.53
315.0	22.69	22.14	21.70	21.42	21.31	21.26	21.37	21.20	21.09
360.0	21.86	21.42	21.09	20.87	20.87	20.92	20.81	20.70	20.70

C/γ(°)	63.0	64.0	65.0	66.0	67.0	68.0	69.0	70.0	71.0
0.0	20.26	19.48	18.76	18.05	16.88	16.27	15.78	15.17	14.61
45.0	21.20	20.81	20.04	19.21	18.54	17.38	16.72	16.11	15.39
90.0	21.31	20.20	19.54	18.82	17.60	16.88	16.27	15.50	15.11
135.0	21.37	20.87	20.04	19.43	18.38	17.38	16.72	16.16	15.44
180.0	20.87	20.81	20.54	19.87	18.99	18.27	17.21	16.50	15.94
225.0	21.03	20.65	19.82	18.99	18.21	17.27	16.44	15.89	15.33
270.0	21.42	21.15	20.54	19.71	18.88	18.10	17.10	16.33	15.83
315.0	20.81	20.31	19.48	18.76	17.88	16.99	16.33	15.83	15.17
360.0	20.26	19.48	18.76	18.05	16.88	16.27	15.78	15.17	14.61

C/γ(°)	72.0	73.0	74.0	75.0	76.0	77.0	78.0	79.0	80.0
0.0	14.28	14.00	13.67	13.34	13.06	12.79	12.45	12.18	11.90
45.0	14.89	14.50	14.12	13.78	13.51	13.23	12.84	12.62	12.29
90.0	14.67	14.28	14.00	13.67	13.34	13.06	12.73	12.40	12.07
135.0	14.95	14.61	14.17	13.89	13.56	13.23	12.95	12.68	12.40
180.0	15.28	14.78	14.39	14.06	13.62	13.40	13.12	12.84	12.51
225.0	14.89	14.45	14.17	13.84	13.51	13.17	12.90	12.68	12.29
270.0	15.33	14.89	14.50	14.23	13.89	13.62	13.23	12.95	12.68
315.0	14.78	14.34	14.00	13.73	13.40	13.12	12.84	12.57	12.23
360.0	14.28	14.00	13.67	13.34	13.06	12.79	12.45	12.18	11.90

C/γ(°)	81.0	82.0	83.0	84.0	85.0	86.0	87.0	88.0	89.0
0.0	11.62	11.40	11.18	10.96	10.74	10.57	10.35	10.19	10.13
45.0	12.01	11.68	11.40	11.13	10.96	10.68	10.52	10.35	10.13
90.0	11.85	11.51	11.29	11.07	10.85	10.63	10.46	10.46	10.19
135.0	12.12	11.79	11.51	11.29	11.02	10.85	10.63	10.41	10.30
180.0	12.23	11.96	11.68	11.35	11.18	10.96	10.79	10.57	10.41
225.0	12.07	11.73	11.46	11.24	10.96	10.85	10.63	10.41	10.41
270.0	12.29	12.01	11.68	11.46	11.18	10.96	10.79	10.52	10.41
315.0	11.96	11.68	11.46	11.18	10.96	10.79	10.63	10.41	10.19
360.0	11.62	11.40	11.18	10.96	10.74	10.57	10.35	10.19	10.13

Intensity data(cd)

C/γ(°)	90.0
0.0	10.19
45.0	10.13
90.0	10.19
135.0	10.24
180.0	10.19
225.0	10.19
270.0	10.13
315.0	10.19
360.0	10.19