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NATA

Client:
LumCAT: 2-2643-L
Luminaire: 92.70.411.00
Report No: 20231019-B009
Ballast type: AC

Test No: 20231019-C009	Voltage(V): 34.200
LampCAT: NICHIA NFCWJ120B-V3	Current(A): 0.577
Lamp flux(lm): 2611.4	Power (W): 19.733
Number of Lamps: 1	PF: 0.000
Length(mm): 0	Width(mm): 0
Phm Type: C	Height(mm): 0

Photometric Results

Lumens(lm): 2482.86, Efficiency(%): 95.08% , Luminous Efficacy(lm/W): 125.82
Central intensity(cd): 12941.670, Maximum intensity(cd): 12941.670
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=46.8
[C90/270]Total=46.8
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(%): 95.08%
Up flux rate of LUM(%): - -
Down flux rate of LUM(%): 100.00%
CIE Type : Direct lighting
Output flux ratio in π solid angle : 98.146%

Zonal flux distribution table

γ(°)	Average I(cd)	Zonal F(lm)	Sum F(lm)	Eff Flux(%)	Eff Sum(%)
0.0	12941.672	0.000	0	0.00%	0.00%
1.0	12768.692	12.302	12.302	0.47%	0.50%
2.0	12265.389	35.931	48.233	1.38%	1.94%
3.0	11774.195	57.495	105.728	2.20%	4.26%
4.0	11111.682	76.606	182.334	2.93%	7.34%
5.0	10347.594	92.317	274.651	3.54%	11.06%
6.0	9445.746	104.019	378.67	3.98%	15.25%
7.0	8496.016	111.364	490.034	4.26%	19.74%
8.0	7535.286	114.733	604.767	4.39%	24.36%
9.0	6595.658	114.524	719.291	4.39%	28.97%
10.0	5746.257	111.690	830.981	4.28%	33.47%
11.0	5021.817	107.595	938.576	4.12%	37.80%
12.0	4329.897	102.228	1040.804	3.91%	41.92%
13.0	3790.199	96.365	1137.169	3.69%	45.80%
14.0	3359.410	91.514	1228.683	3.50%	49.49%
15.0	2980.376	87.035	1315.719	3.33%	52.99%
16.0	2734.053	83.732	1399.451	3.21%	56.36%
17.0	2480.879	81.211	1480.661	3.11%	59.64%
18.0	2262.717	78.212	1558.873	3.00%	62.79%
19.0	1984.773	73.898	1632.771	2.83%	65.76%
20.0	1803.835	69.342	1702.113	2.66%	68.55%
21.0	1639.643	66.122	1768.234	2.53%	71.22%
22.0	1446.140	62.010	1830.245	2.37%	73.72%
23.0	1343.252	58.529	1888.774	2.24%	76.07%
24.0	1212.036	55.868	1944.641	2.14%	78.32%
25.0	1107.861	52.749	1997.391	2.02%	80.45%
26.0	1009.594	49.983	2047.373	1.91%	82.46%
27.0	900.997	46.743	2094.117	1.79%	84.34%
28.0	796.635	42.980	2137.097	1.65%	86.07%
29.0	695.504	39.039	2176.136	1.49%	87.65%
30.0	597.902	34.922	2211.057	1.34%	89.05%
31.0	510.914	30.857	2241.914	1.18%	90.30%
32.0	432.422	27.025	2268.939	1.03%	91.38%
33.0	361.770	23.397	2292.337	0.90%	92.33%
34.0	297.277	19.945	2312.281	0.76%	93.13%
35.0	254.163	17.126	2329.407	0.66%	93.82%
36.0	207.389	14.696	2344.103	0.56%	94.41%
37.0	178.536	12.587	2356.69	0.48%	94.92%

Zonal flux distribution table

γ(°)	Average I(cd)	Zonal F(lm)	Sum F(lm)	Eff Flux(%)	Eff Sum(%)
38.0	128.351	10.243	2366.933	0.39%	95.33%
39.0	103.539	7.915	2374.848	0.30%	95.65%
40.0	85.715	6.601	2381.449	0.25%	95.92%
41.0	70.693	5.570	2387.018	0.21%	96.14%
42.0	60.156	4.754	2391.772	0.18%	96.33%
43.0	51.541	4.138	2395.91	0.16%	96.50%
44.0	45.258	3.653	2399.563	0.14%	96.64%
45.0	40.242	3.286	2402.849	0.13%	96.78%
46.0	36.734	3.010	2405.86	0.12%	96.90%
47.0	33.814	2.806	2408.665	0.11%	97.01%
48.0	31.420	2.637	2411.303	0.10%	97.12%
49.0	29.261	2.492	2413.795	0.10%	97.22%
50.0	27.545	2.368	2416.163	0.09%	97.31%
51.0	26.127	2.271	2418.434	0.09%	97.40%
52.0	24.875	2.189	2420.622	0.08%	97.49%
53.0	23.885	2.121	2422.743	0.08%	97.58%
54.0	23.055	2.069	2424.812	0.08%	97.66%
55.0	22.377	2.028	2426.84	0.08%	97.74%
56.0	21.920	2.002	2428.842	0.08%	97.82%
57.0	21.581	1.989	2430.831	0.08%	97.90%
58.0	21.387	1.987	2432.818	0.08%	97.98%
59.0	21.325	1.997	2434.815	0.08%	98.06%
60.0	21.297	2.014	2436.828	0.08%	98.15%
61.0	21.249	2.030	2438.859	0.08%	98.23%
62.0	21.166	2.044	2440.902	0.08%	98.31%
63.0	20.861	2.044	2442.946	0.08%	98.39%
64.0	20.439	2.027	2444.973	0.08%	98.47%
65.0	19.734	1.988	2446.961	0.08%	98.55%
66.0	18.993	1.932	2448.893	0.07%	98.63%
67.0	18.156	1.868	2450.761	0.07%	98.71%
68.0	17.291	1.796	2452.557	0.07%	98.78%
69.0	16.571	1.728	2454.284	0.07%	98.85%
70.0	15.935	1.669	2455.954	0.06%	98.92%
71.0	15.374	1.618	2457.572	0.06%	98.98%
72.0	14.876	1.573	2459.145	0.06%	99.04%
73.0	14.496	1.536	2460.681	0.06%	99.11%
74.0	14.157	1.506	2462.187	0.06%	99.17%
75.0	13.838	1.479	2463.667	0.06%	99.23%

Zonal flux distribution table

γ(°)	Average I(cd)	Zonal F(lm)	Sum F(lm)	Eff Flux(%)	Eff Sum(%)
76.0	13.520	1.452	2465.119	0.06%	99.29%
77.0	13.230	1.426	2466.545	0.05%	99.34%
78.0	12.918	1.400	2467.945	0.05%	99.40%
79.0	12.641	1.373	2469.318	0.05%	99.45%
80.0	12.372	1.349	2470.667	0.05%	99.51%
81.0	12.095	1.323	2471.99	0.05%	99.56%
82.0	11.818	1.297	2473.286	0.05%	99.61%
83.0	11.562	1.271	2474.557	0.05%	99.67%
84.0	11.313	1.246	2475.804	0.05%	99.72%
85.0	11.098	1.223	2477.027	0.05%	99.76%
86.0	10.884	1.202	2478.228	0.05%	99.81%
87.0	10.718	1.182	2479.411	0.05%	99.86%
88.0	10.531	1.164	2480.574	0.04%	99.91%
89.0	10.434	1.149	2481.724	0.04%	99.95%
90.0	10.372	1.141	2482.864	0.04%	100.00%

Zonal flux distribution table

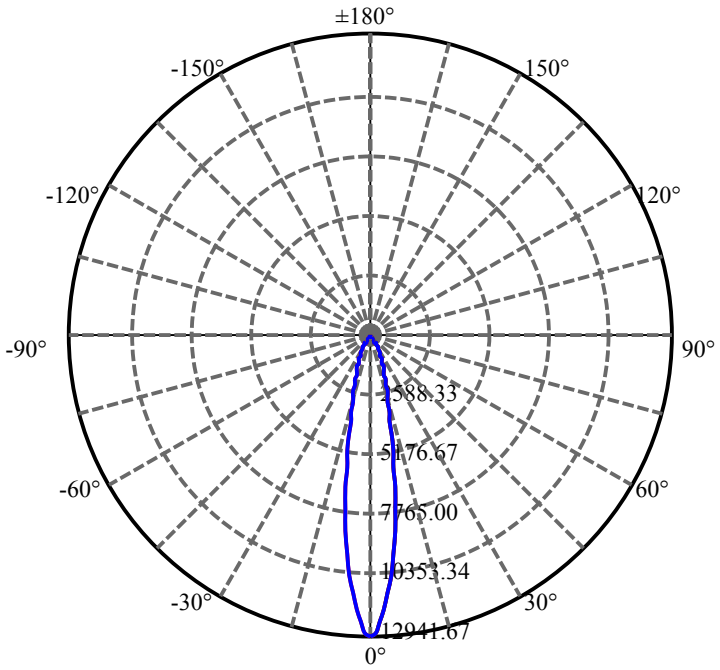
ZONAL LUMEN SUMMARY

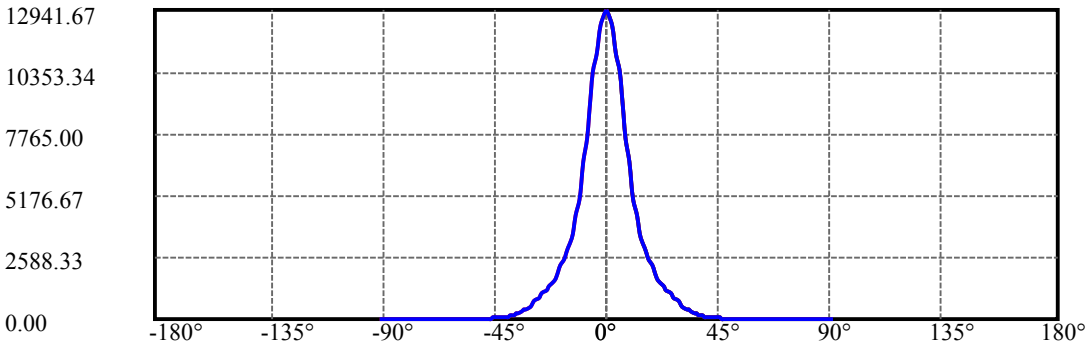
Zone	Lumens	%Lamp	%Fixt
0-30	2211.06	84.67%	89.05%
0-40	2381.45	91.20%	95.92%
0-60	2436.83	93.32%	98.15%
0-90	2481.72	95.03%	99.95%
0-120	2481.72	95.03%	99.95%
0-180	2482.86	95.08%	100.00%
60-90	44.90	1.72%	1.81%
90-120	0.00	0.00%	0.00%
90-130	0.00	0.00%	0.00%
90-150	0.00	0.00%	0.00%
90-180	0.00	0.00%	0.00%
0-24.79	1986.29	76.06%	80.00%

ZONAL LUMEN SUMMARY

0-10	830.98
10-20	871.13
20-30	508.94
30-40	170.39
40-50	34.71
50-60	20.67
60-70	19.13
70-80	14.71
80-90	11.06
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):

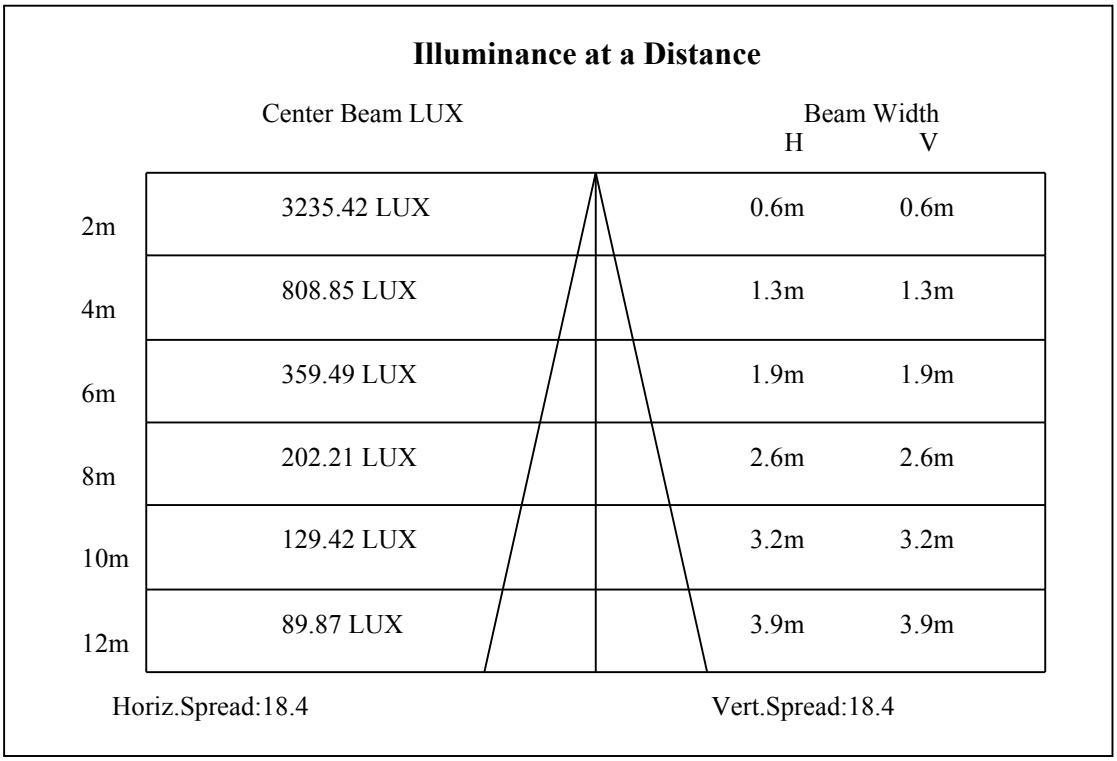
C0/C180:

C90/C270:

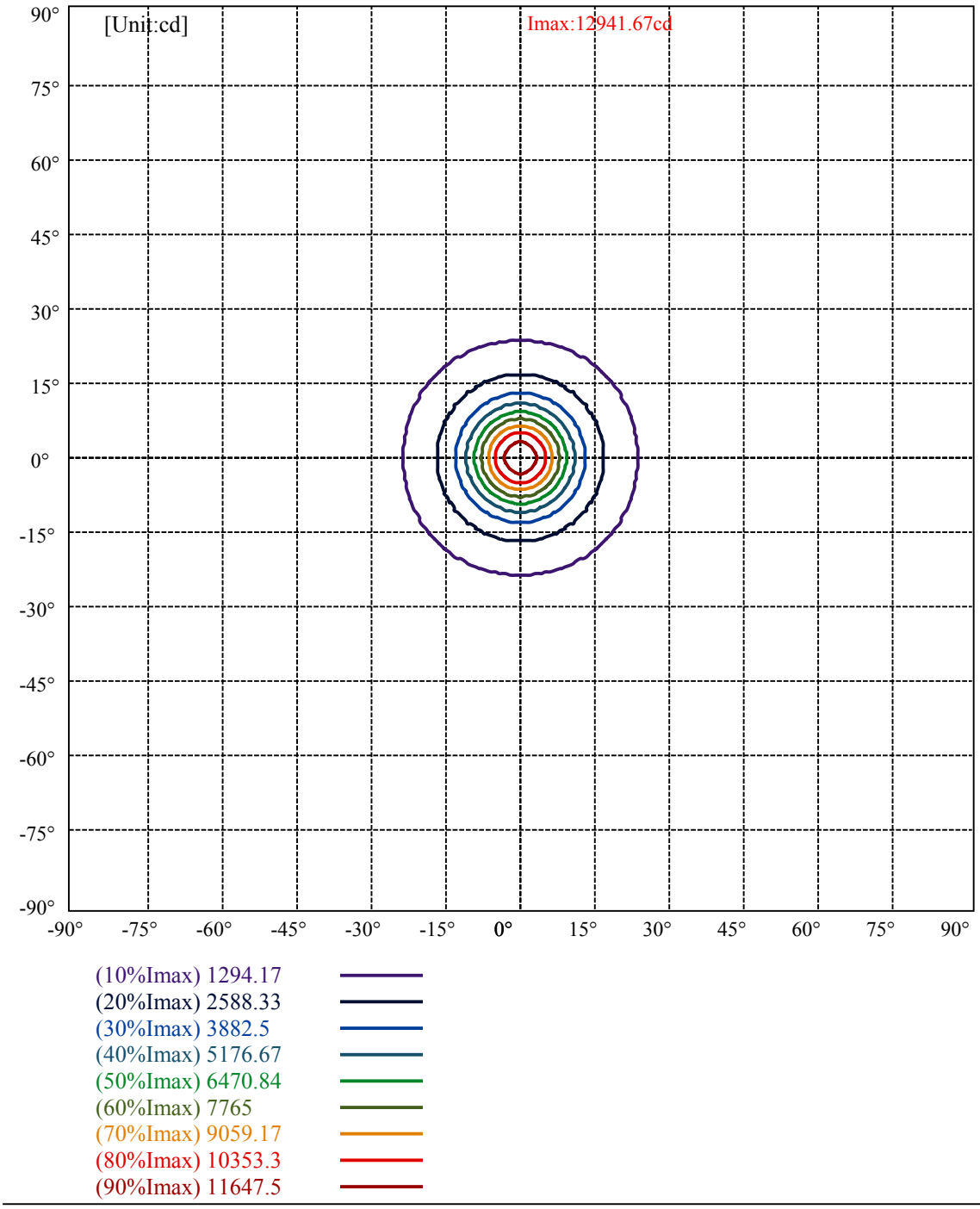
Field angle(10%Imax):C0/180Left:23.4 Right:23.4
:C90/270Left:23.4 Right:23.4

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

Lux distance Curve



ISO-Intensity(V-H)

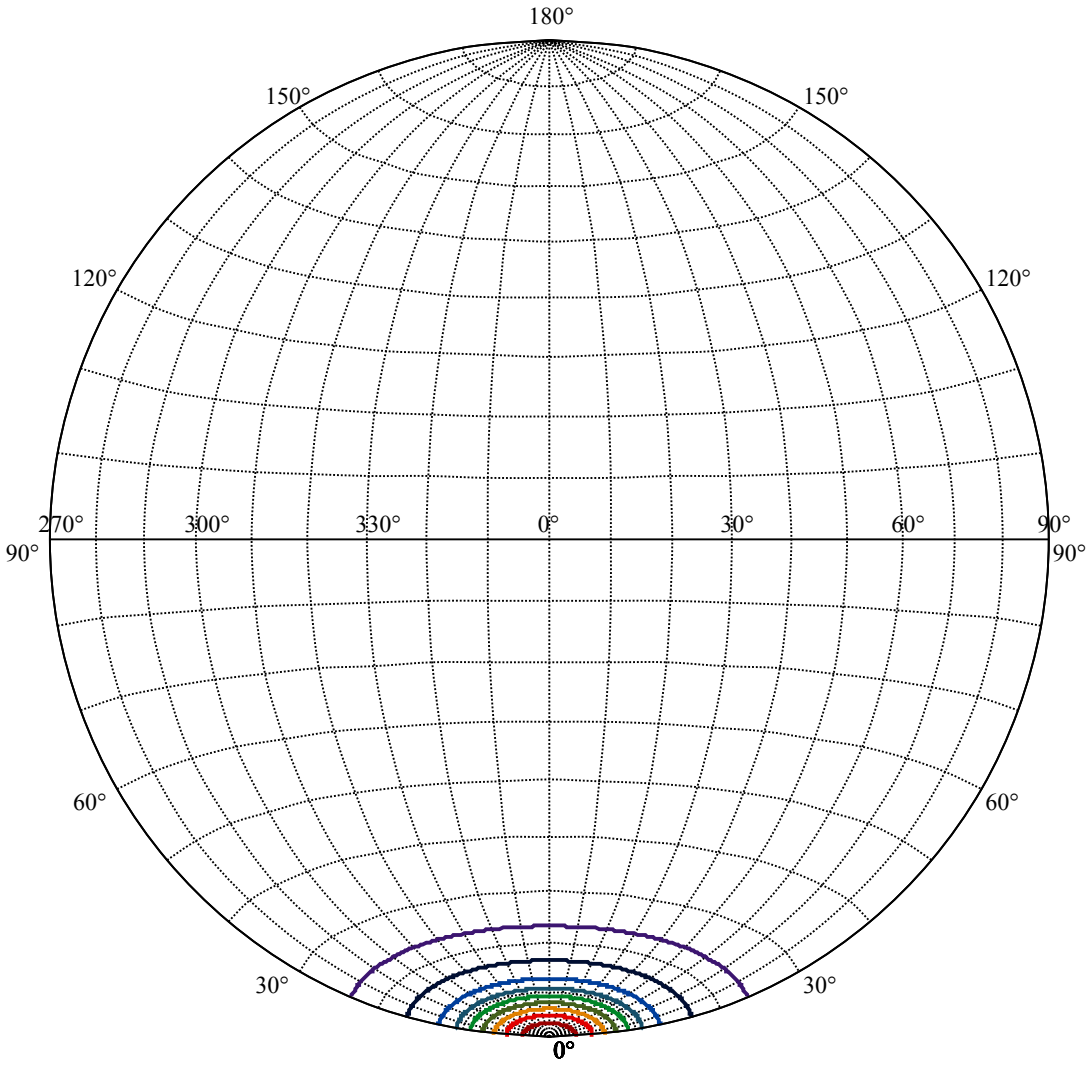


Equipment: GMS1980
Temperature(°C): 0.0

Date: 2023/10/19
Humidity(%): 0.0%

Operator: NT07
Distance(m): 7.44

ISO candela diagram on circular web



House [Unit:cd] Road

Imax:12941.67

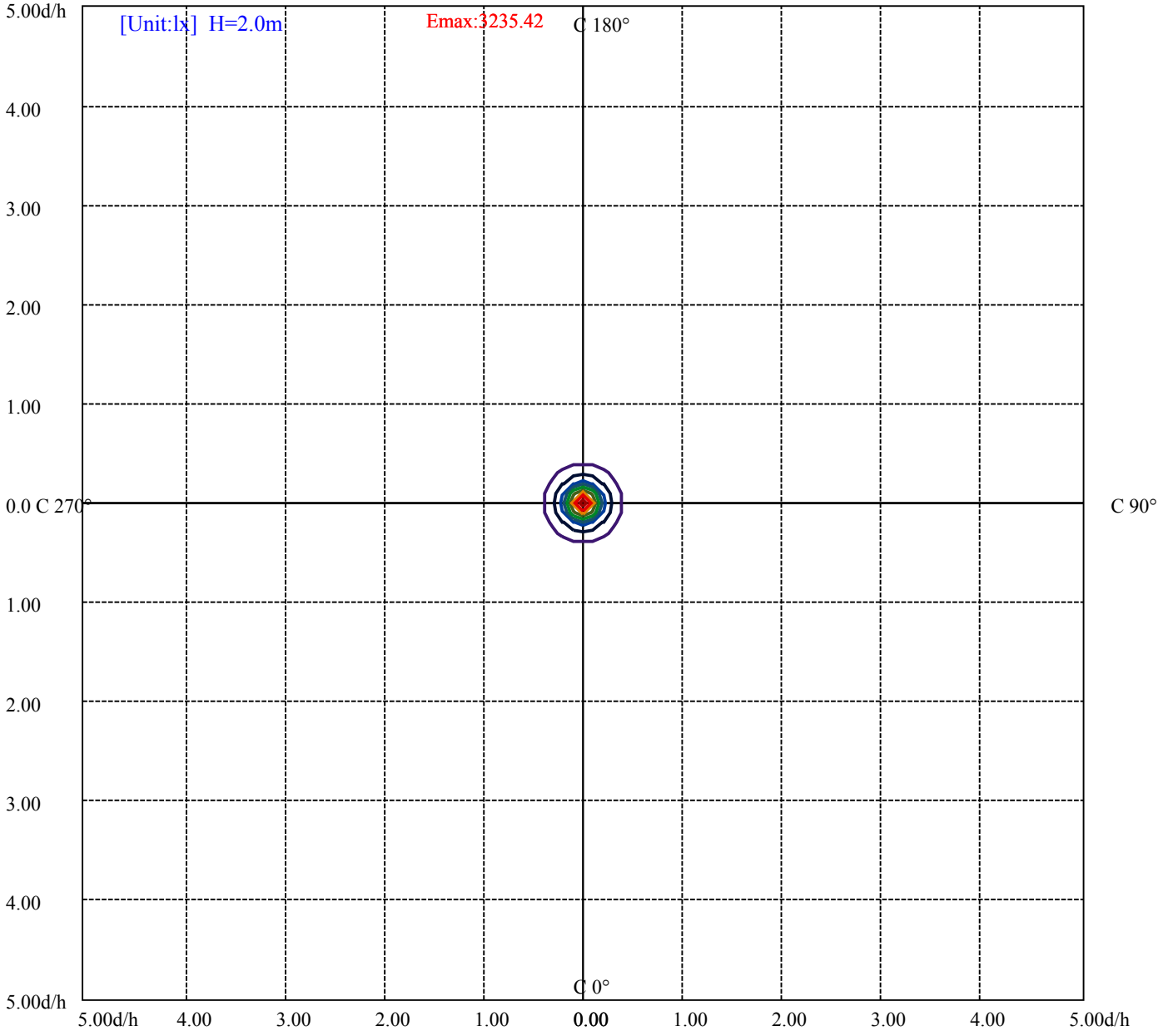
(10%Imax) 1294.17
(20%Imax) 2588.33
(30%Imax) 3882.5
(40%Imax) 5176.67
(50%Imax) 6470.84
(60%Imax) 7765
(70%Imax) 9059.17
(80%Imax) 10353.3
(90%Imax) 11647.5

Equipment: GMS1980
Temperature(°C): 0.0

Date: 2023/10/19
Humidity(%): 0.0%

Operator: NT07
Distance(m): 7.44

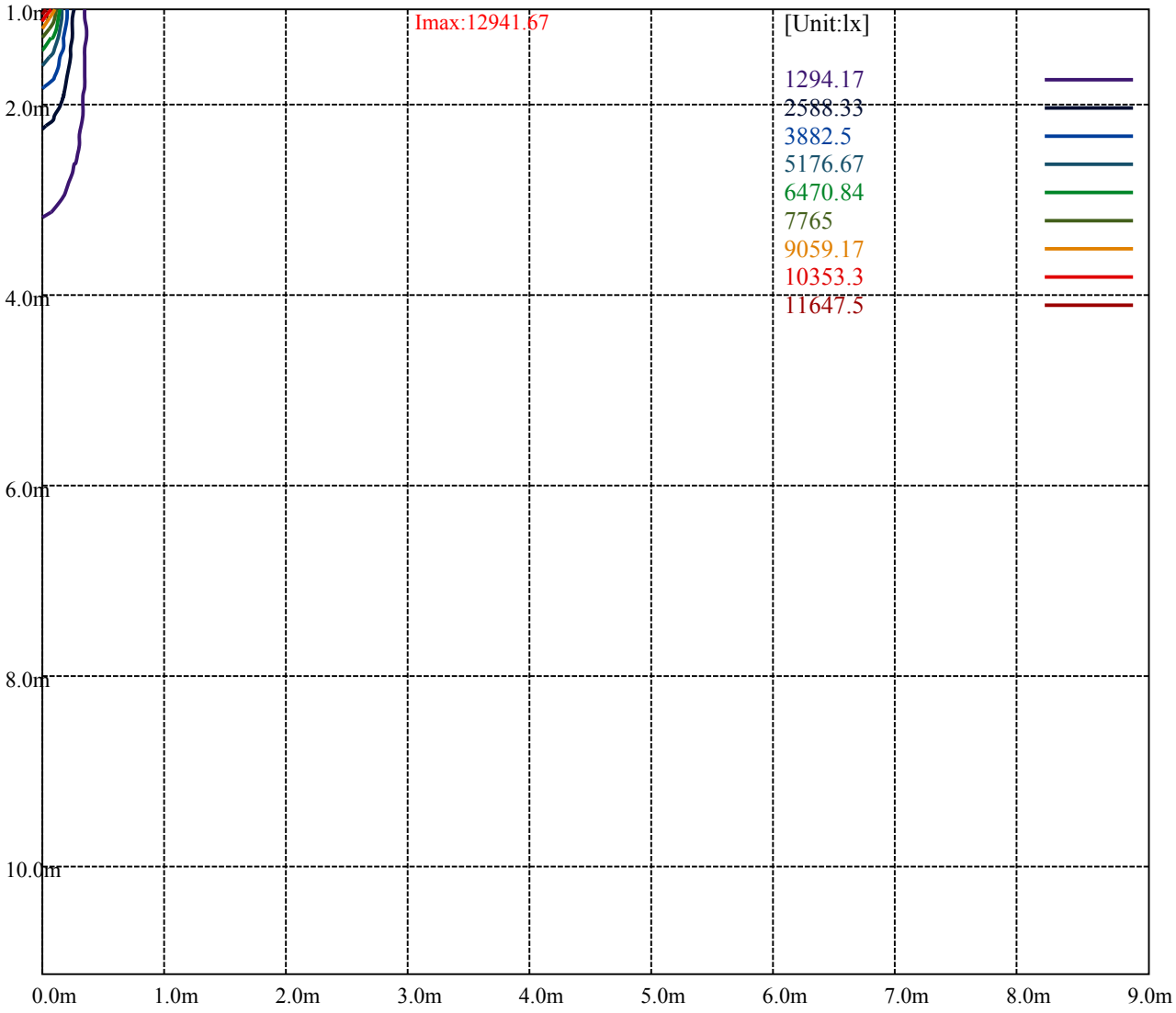
ISO illuminance diagram



(10%Emax) 323.54
(20%Emax) 647.0825
(30%Emax) 970.6225
(40%Emax) 1294.165
(50%Emax) 1617.705
(60%Emax) 1941.248
(70%Emax) 2264.788
(80%Emax) 2588.325
(90%Emax) 2911.875

Equipment: GMS1980
Temperature(°C): 0.0
Date: 2023/10/19
Humidity(%): 0.0%
Operator: NT07
Distance(m): 7.44

Space ISO Lux diagram



Equipment: GMS1980
Temperature(°C): 0.0

Date: 2023/10/19
Humidity(%): 0.0%

Operator: NT07
Distance(m): 7.44

Luminance Limitting Curve(no luminous side)

Luminance Table

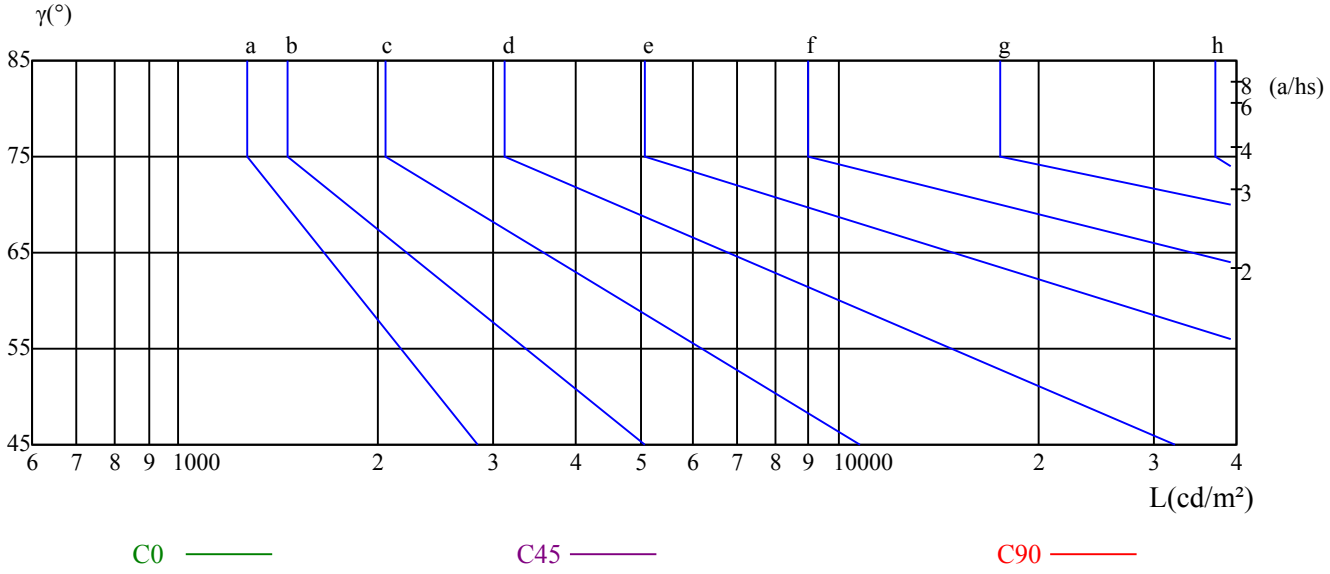
γ	45	50	55	60	65	70	75	80	85
C0	0	0	0	0	0	0	0	0	0
C45	0	0	0	0	0	0	0	0	0
C90	0	0	0	0	0	0	0	0	0

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

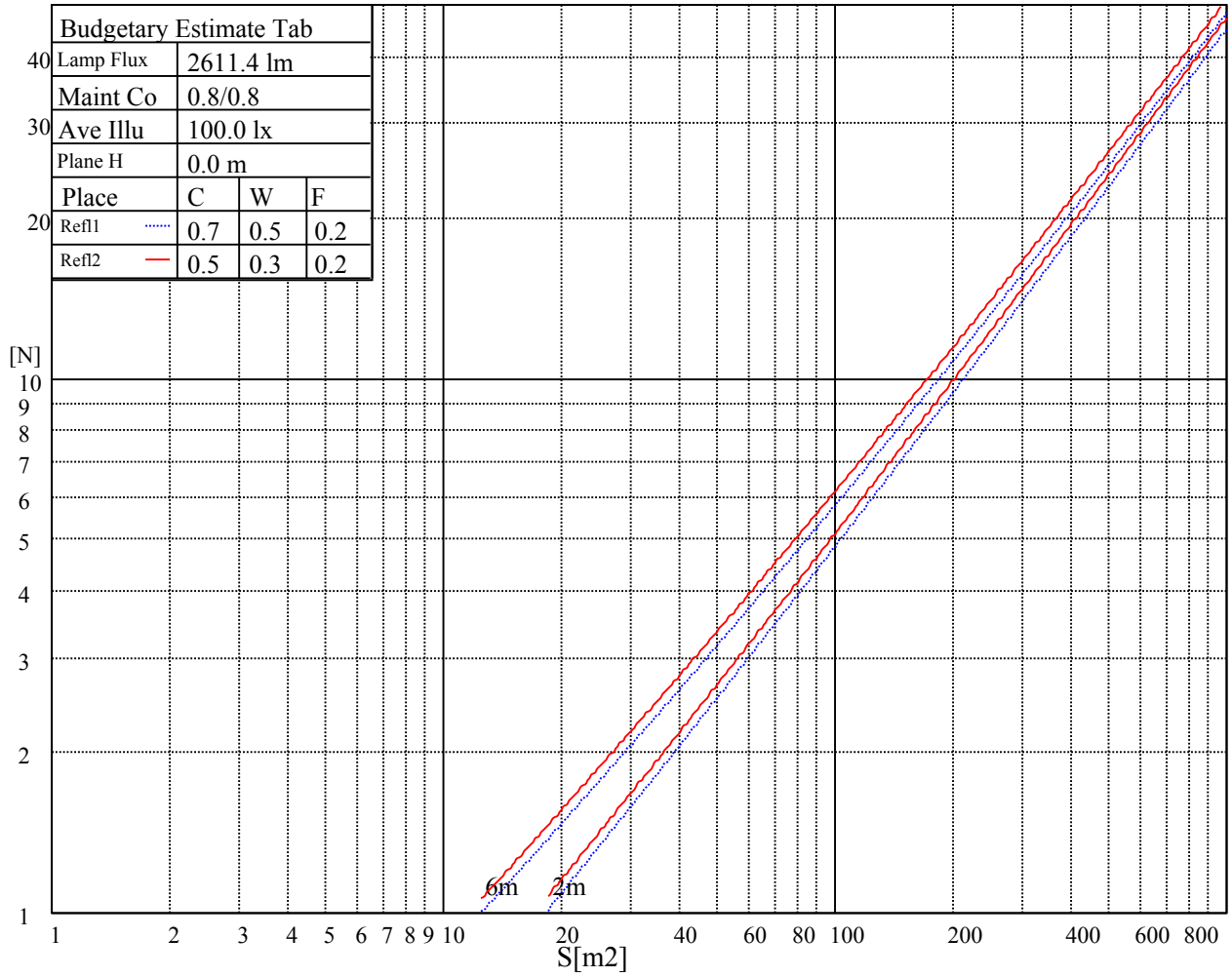
Luminance Limitting Curve



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 X Y	Viewed crosswise					Viewed endwise				
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
2H 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
2H 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
2H 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
2H 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
2H 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
4H 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 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
4H 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
4H 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
4H 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
8H 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 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
8H 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
12H 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
12H 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

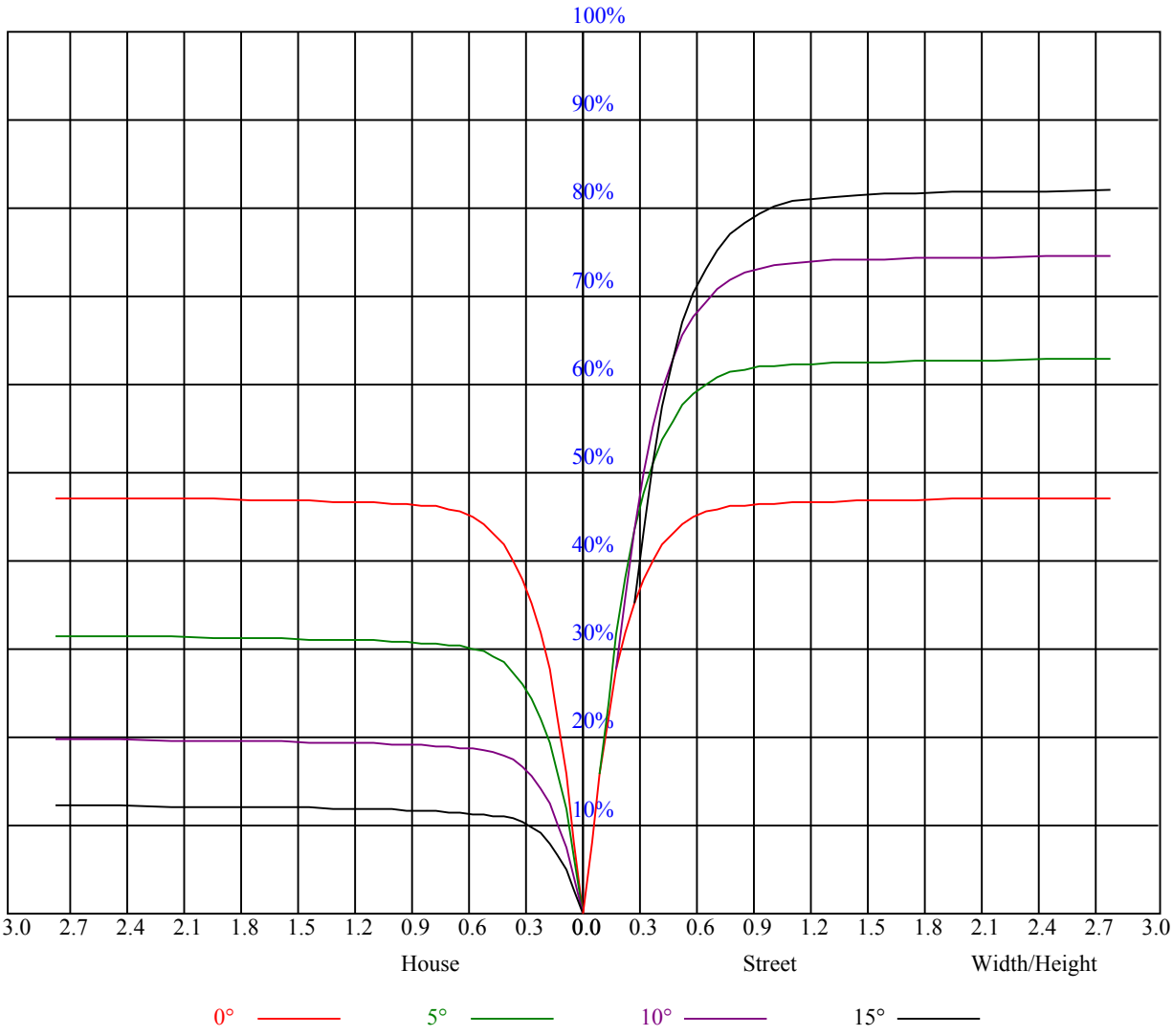


Equipment: GMS1980 Date: 2023/10/19 Operator: NT07
Temperature(°C): 0.0 Humidity(%): 0.0% Distance(m): 7.44

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	1.11	1.11	1.11	1.06	1.06	1.06	1.01	1.01	1.01	0.97	0.97	0.97	0.95
1	1.06	1.04	1.03	1.04	1.03	1.01	1.01	0.99	0.98	0.97	0.96	0.95	0.94	0.93	0.92	0.91
2	1.01	0.98	0.95	0.99	0.96	0.94	0.96	0.94	0.92	0.93	0.92	0.90	0.91	0.89	0.88	0.87
3	0.96	0.92	0.89	0.95	0.91	0.88	0.92	0.89	0.87	0.90	0.88	0.86	0.88	0.86	0.84	0.83
4	0.92	0.88	0.84	0.91	0.87	0.84	0.89	0.85	0.83	0.87	0.84	0.82	0.85	0.83	0.81	0.80
5	0.88	0.84	0.80	0.87	0.83	0.80	0.85	0.82	0.79	0.84	0.81	0.79	0.83	0.80	0.78	0.77
6	0.84	0.80	0.77	0.84	0.80	0.77	0.82	0.79	0.76	0.81	0.78	0.76	0.80	0.77	0.75	0.74
7	0.81	0.77	0.74	0.81	0.77	0.74	0.80	0.76	0.73	0.79	0.75	0.73	0.78	0.75	0.73	0.72
8	0.79	0.74	0.71	0.78	0.74	0.71	0.77	0.74	0.71	0.76	0.73	0.71	0.76	0.73	0.70	0.69
9	0.76	0.72	0.69	0.76	0.72	0.69	0.75	0.71	0.69	0.74	0.71	0.68	0.73	0.70	0.68	0.67
10	0.74	0.69	0.67	0.73	0.69	0.67	0.73	0.69	0.66	0.72	0.69	0.66	0.71	0.68	0.66	0.65

Coefficient Utilization Curve



Equipment: GMS1980	Date: 2023/10/19	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	12792.22	11901.02	10921.82	10921.82	10083.77	8962.85	8054.50	7144.49	6264.37
45.0	13052.38	12814.36	12415.81	11690.68	10954.48	9886.15	8978.35	8070.55	6930.27
90.0	12864.18	12454.56	10957.25	10957.25	10116.98	8978.35	8060.04	7135.63	6274.33
135.0	13057.91	12930.60	12576.34	12050.48	11175.89	10345.59	9454.39	8319.65	7411.85
180.0	12792.22	13035.77	13063.45	12853.11	12310.64	11718.36	10982.15	9930.44	9017.10
225.0	13052.38	13046.84	12736.86	11984.05	10969.42	10969.42	9930.44	9032.60	8093.80
270.0	12864.18	13057.91	12991.49	12692.58	12238.68	11463.73	10744.13	9891.69	8768.01
315.0	13057.91	12908.46	12460.10	11043.60	11043.60	10456.30	9361.95	8443.08	7522.55
360.0	12792.22	11901.02	10921.82	10921.82	10083.77	8962.85	8054.50	7144.49	6264.37

C/γ(°)	9.0	10.0	11.0	12.0	13.0	14.0	15.0	16.0	17.0
0.0	5301.77	4641.95	3937.86	3480.08	3114.75	2738.90	2482.61	2263.41	2026.50
45.0	6094.43	5341.62	4682.91	3974.39	3520.49	3144.08	2839.64	2839.64	2280.01
90.0	5317.27	4654.13	4085.10	3619.02	3146.30	2833.55	2569.51	2283.89	2091.81
135.0	6526.19	5718.03	5037.18	4278.83	3764.04	3354.43	2933.74	2861.78	2861.78
180.0	8098.23	6952.41	6094.43	5308.41	4489.18	3924.57	3476.21	3110.87	2861.78
225.0	6946.88	6086.13	5315.61	4500.80	3958.89	3509.42	3058.29	2761.04	2516.93
270.0	7860.21	6980.09	6122.11	5175.56	4533.46	3990.99	3531.56	3083.20	2834.10
315.0	6620.29	5595.70	4899.35	4302.08	3794.49	3379.34	2951.45	2668.60	2374.12
360.0	5301.77	4641.95	3937.86	3480.08	3114.75	2738.90	2482.61	2263.41	2026.50

C/γ(°)	18.0	19.0	20.0	21.0	22.0	23.0	24.0	25.0	26.0
0.0	1853.79	1699.36	1554.33	1394.91	1085.15	1085.15	1058.58	932.43	830.86
45.0	2087.94	1916.34	1714.30	1572.04	1441.41	1295.83	1186.78	1080.50	950.97
90.0	1879.25	1725.37	1583.11	1450.82	1102.09	1102.09	1076.41	975.11	846.91
135.0	2168.20	1989.41	1785.71	1636.81	1507.28	1386.05	1247.67	1139.18	1034.56
180.0	2861.78	2266.18	2076.87	1865.97	1704.89	1564.85	1404.87	1291.40	1155.23
225.0	2247.91	2058.05	1887.00	1731.46	1556.54	1428.68	1233.28	1099.49	1074.69
270.0	2834.10	2232.41	2044.21	1828.88	1670.02	1531.63	1406.53	1262.62	1152.46
315.0	2168.75	1991.07	1785.15	1636.25	1501.74	1351.73	1082.16	1082.16	1031.07
360.0	1853.79	1699.36	1554.33	1394.91	1085.15	1085.15	1058.58	932.43	830.86

C/γ(°)	27.0	28.0	29.0	30.0	31.0	32.0	33.0	34.0	35.0
0.0	707.42	619.13	537.15	443.83	376.46	315.24	261.44	205.20	168.00
45.0	848.02	725.13	633.80	552.43	476.59	390.24	328.80	287.29	287.29
90.0	746.50	651.46	564.72	467.41	397.16	334.39	267.08	221.91	174.81
135.0	931.05	801.52	704.10	612.21	509.81	433.42	364.23	288.95	288.95
180.0	1051.16	950.42	850.23	725.69	631.03	545.79	467.74	381.94	320.50
225.0	971.73	871.65	744.84	649.80	561.34	461.65	390.24	326.64	257.84
270.0	1047.84	949.31	824.77	720.15	627.16	546.34	451.13	377.51	298.36
315.0	904.26	804.45	704.43	611.71	507.76	432.31	363.51	288.78	237.58
360.0	707.42	619.13	537.15	443.83	376.46	315.24	261.44	205.20	168.00

C/γ(°)	36.0	37.0	38.0	39.0	40.0	41.0	42.0	43.0	44.0
0.0	138.27	114.25	90.89	76.66	64.93	53.69	47.27	42.40	37.81
45.0	174.36	143.31	117.68	93.05	77.88	65.54	54.25	47.49	42.40
90.0	144.81	119.56	98.75	77.88	65.15	55.46	48.32	42.07	38.30
135.0	226.73	148.46	121.78	100.91	84.75	68.97	59.06	51.31	45.39
180.0	292.27	292.27	167.61	137.66	113.47	90.23	76.00	62.05	53.58
225.0	211.73	173.31	141.71	110.38	91.28	76.50	64.71	53.25	46.50
270.0	286.18	286.18	164.95	130.14	106.89	86.02	72.29	62.05	53.64
315.0	184.77	150.95	123.44	101.63	81.37	69.14	59.34	51.70	44.45
360.0	138.27	114.25	90.89	76.66	64.93	53.69	47.27	42.40	37.81

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	34.93	32.55	30.06	28.40	27.01	25.79	24.52	23.69	22.92
45.0	37.81	34.98	32.55	30.50	28.34	26.96	25.68	24.63	23.58
90.0	35.32	32.71	30.11	28.45	26.57	25.46	24.47	23.47	22.81
135.0	40.08	36.81	34.10	31.72	29.28	27.62	25.96	24.91	24.02
180.0	47.16	41.46	37.97	35.15	32.71	30.11	28.40	26.90	25.68
225.0	40.57	37.09	34.15	31.22	29.28	27.57	26.13	24.58	23.58
270.0	45.83	41.46	37.47	34.76	31.61	29.56	27.84	25.96	24.74
315.0	40.24	36.81	34.10	31.16	29.28	27.29	26.02	24.85	23.75
360.0	34.93	32.55	30.06	28.40	27.01	25.79	24.52	23.69	22.92

C/γ(°)	54.0	55.0	56.0	57.0	58.0	59.0	60.0	61.0	62.0
0.0	22.36	21.75	21.48	21.37	21.37	21.31	21.20	21.15	20.92
45.0	22.86	22.31	21.81	21.48	21.37	21.42	21.42	21.31	21.26
90.0	22.25	21.75	21.53	21.42	21.37	21.48	21.37	21.31	21.26
135.0	23.19	22.53	22.14	21.75	21.53	21.48	21.53	21.42	21.37
180.0	24.36	23.53	22.86	22.20	21.81	21.53	21.42	21.37	21.42
225.0	22.75	22.09	21.53	21.26	21.03	20.98	21.03	21.09	20.98
270.0	23.69	22.64	22.09	21.64	21.26	21.09	21.09	21.09	20.98
315.0	22.97	22.42	21.92	21.53	21.37	21.31	21.31	21.26	21.15
360.0	22.36	21.75	21.48	21.37	21.37	21.31	21.20	21.15	20.92

C/γ(°)	63.0	64.0	65.0	66.0	67.0	68.0	69.0	70.0	71.0
0.0	20.09	19.48	18.76	17.99	16.94	16.38	15.78	15.22	14.78
45.0	20.98	20.31	19.54	18.71	17.88	16.99	16.33	15.61	15.11
90.0	20.43	19.65	18.82	17.99	17.05	16.27	15.72	15.17	14.72
135.0	21.31	20.98	19.93	19.26	18.54	17.38	16.66	15.94	15.44
180.0	21.26	21.26	21.09	20.43	19.48	18.82	18.05	17.21	16.44
225.0	20.92	20.65	19.76	19.10	18.49	17.44	16.66	16.11	15.55
270.0	20.87	20.76	20.31	19.54	18.82	17.93	17.10	16.44	15.72
315.0	21.03	20.43	19.65	18.93	18.05	17.10	16.27	15.78	15.22
360.0	20.09	19.48	18.76	17.99	16.94	16.38	15.78	15.22	14.78

C/γ(°)	72.0	73.0	74.0	75.0	76.0	77.0	78.0	79.0	80.0
0.0	14.39	14.12	13.84	13.51	13.23	12.90	12.57	12.29	12.01
45.0	14.61	14.23	13.95	13.56	13.28	13.01	12.73	12.45	12.23
90.0	14.34	14.00	13.73	13.45	13.12	12.84	12.57	12.23	11.96
135.0	14.89	14.56	14.12	13.84	13.56	13.28	12.90	12.62	12.40
180.0	15.83	15.33	14.83	14.50	14.06	13.78	13.45	13.23	12.84
225.0	14.95	14.56	14.28	14.00	13.62	13.34	13.01	12.73	12.51
270.0	15.22	14.83	14.45	14.06	13.78	13.51	13.23	12.95	12.68
315.0	14.78	14.34	14.06	13.78	13.51	13.17	12.90	12.62	12.34
360.0	14.39	14.12	13.84	13.51	13.23	12.90	12.57	12.29	12.01

C/γ(°)	81.0	82.0	83.0	84.0	85.0	86.0	87.0	88.0	89.0
0.0	11.79	11.51	11.35	11.07	10.90	10.68	10.57	10.35	10.41
45.0	11.96	11.68	11.40	11.13	10.96	10.79	10.57	10.46	10.30
90.0	11.73	11.46	11.24	11.02	10.85	10.68	10.52	10.30	10.35
135.0	12.07	11.79	11.46	11.24	11.02	10.85	10.68	10.52	10.35
180.0	12.57	12.29	11.96	11.73	11.40	11.18	10.96	10.79	10.63
225.0	12.18	11.96	11.73	11.46	11.18	10.96	10.85	10.63	10.52
270.0	12.40	12.07	11.85	11.57	11.35	11.07	10.90	10.68	10.57
315.0	12.07	11.79	11.51	11.29	11.13	10.85	10.68	10.52	10.35
360.0	11.79	11.51	11.35	11.07	10.90	10.68	10.57	10.35	10.41

Intensity data(cd)

C/γ(°)	90.0
0.0	10.41
45.0	10.30
90.0	10.35
135.0	10.35
180.0	10.57
225.0	10.30
270.0	10.41
315.0	10.30
360.0	10.41