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NATA

Client:
LumCAT: 2-2643-L
Luminaire: 92.70.411.00
Report No: 20231023-B008
Ballast type: AC

Test No: 20231023-C008	Voltage(V): 36.640
LampCAT: NICHIA NFDWJ130B-V3	Current(A): 0.576
Lamp flux(lm): 2810.0	Power (W): 21.104
Number of Lamps: 1	PF: 0.000
Length(mm): 0	Width(mm): 0
Phm Type: C	Height(mm): 0

Photometric Results

Lumens(lm): 2640.43, Efficiency(%): 93.97% , Luminous Efficacy(lm/W): 125.12
Central intensity(cd): 13918.660, Maximum intensity(cd): 13918.660
Angle of maximum intensity: C=0.0 γ=0.0
Beam Angle(50%Imax): [C0/180]Total=18.0
[C90/270]Total=18.0
Field angle(10%Imax): [C0/180]Total=45.8
[C90/270]Total=45.8
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(%): 93.97%
Up flux rate of LUM(%): - -
Down flux rate of LUM(%): 100.00%
CIE Type : Direct lighting
Output flux ratio in π solid angle : 97.937%

Zonal flux distribution table

γ(°)	Average I(cd)	Zonal F(lm)	Sum F(lm)	Eff Flux(%)	Eff Sum(%)
0.0	13918.663	0.000	0	0.00%	0.00%
1.0	13777.511	13.252	13.252	0.47%	0.50%
2.0	13369.278	38.964	52.216	1.39%	1.98%
3.0	12588.931	62.084	114.299	2.21%	4.33%
4.0	11688.189	81.263	195.563	2.89%	7.41%
5.0	11034.879	97.753	293.316	3.48%	11.11%
6.0	10134.760	111.252	404.568	3.96%	15.32%
7.0	9027.965	118.943	523.511	4.23%	19.83%
8.0	7923.729	121.320	644.831	4.32%	24.42%
9.0	6928.748	120.371	765.202	4.28%	28.98%
10.0	5975.352	116.777	881.979	4.16%	33.40%
11.0	5156.534	111.230	993.21	3.96%	37.62%
12.0	4518.445	105.761	1098.971	3.76%	41.62%
13.0	3951.555	100.518	1199.489	3.58%	45.43%
14.0	3510.041	95.508	1294.997	3.40%	49.04%
15.0	3152.872	91.471	1386.468	3.26%	52.51%
16.0	2842.961	87.856	1474.324	3.13%	55.84%
17.0	2620.785	85.085	1559.409	3.03%	59.06%
18.0	2363.253	82.176	1641.585	2.92%	62.17%
19.0	2146.474	78.460	1720.045	2.79%	65.14%
20.0	1902.849	74.114	1794.159	2.64%	67.95%
21.0	1715.892	69.487	1863.646	2.47%	70.58%
22.0	1558.481	65.800	1929.446	2.34%	73.07%
23.0	1379.176	61.640	1991.086	2.19%	75.41%
24.0	1256.527	57.626	2048.712	2.05%	77.59%
25.0	1154.385	54.819	2103.531	1.95%	79.67%
26.0	1074.704	52.618	2156.149	1.87%	81.66%
27.0	968.619	49.990	2206.139	1.78%	83.55%
28.0	860.984	46.322	2252.461	1.65%	85.31%
29.0	757.348	42.340	2294.801	1.51%	86.91%
30.0	645.250	37.870	2332.671	1.35%	88.34%
31.0	542.846	33.063	2365.734	1.18%	89.60%
32.0	444.344	28.282	2394.015	1.01%	90.67%
33.0	356.207	23.585	2417.6	0.84%	91.56%
34.0	282.027	19.315	2436.915	0.69%	92.29%
35.0	238.533	16.167	2453.081	0.58%	92.90%
36.0	192.513	13.725	2466.806	0.49%	93.42%
37.0	150.313	11.181	2477.987	0.40%	93.85%

Zonal flux distribution table

γ(°)	Average I(cd)	Zonal F(lm)	Sum F(lm)	Eff Flux(%)	Eff Sum(%)
38.0	132.814	9.450	2487.437	0.34%	94.21%
39.0	118.560	8.580	2496.018	0.31%	94.53%
40.0	106.147	7.837	2503.855	0.28%	94.83%
41.0	94.821	7.156	2511.011	0.25%	95.10%
42.0	85.999	6.569	2517.58	0.23%	95.35%
43.0	77.744	6.066	2523.646	0.22%	95.58%
44.0	70.348	5.589	2529.235	0.20%	95.79%
45.0	64.300	5.175	2534.41	0.18%	95.98%
46.0	59.263	4.832	2539.242	0.17%	96.17%
47.0	54.330	4.518	2543.76	0.16%	96.34%
48.0	50.289	4.229	2547.989	0.15%	96.50%
49.0	46.795	3.987	2551.976	0.14%	96.65%
50.0	43.501	3.765	2555.741	0.13%	96.79%
51.0	40.809	3.567	2559.308	0.13%	96.93%
52.0	38.402	3.399	2562.707	0.12%	97.06%
53.0	36.264	3.248	2565.955	0.12%	97.18%
54.0	34.423	3.116	2569.07	0.11%	97.30%
55.0	32.852	3.003	2572.073	0.11%	97.41%
56.0	31.531	2.909	2574.983	0.10%	97.52%
57.0	30.389	2.831	2577.814	0.10%	97.63%
58.0	29.462	2.768	2580.582	0.10%	97.73%
59.0	28.673	2.718	2583.299	0.10%	97.84%
60.0	27.871	2.671	2585.971	0.10%	97.94%
61.0	27.172	2.627	2588.597	0.09%	98.04%
62.0	26.577	2.590	2591.187	0.09%	98.14%
63.0	25.809	2.548	2593.735	0.09%	98.23%
64.0	24.868	2.487	2596.222	0.09%	98.33%
65.0	24.030	2.420	2598.642	0.09%	98.42%
66.0	23.013	2.347	2600.989	0.08%	98.51%
67.0	22.024	2.265	2603.254	0.08%	98.59%
68.0	21.097	2.184	2605.438	0.08%	98.67%
69.0	20.232	2.108	2607.546	0.08%	98.75%
70.0	19.381	2.034	2609.581	0.07%	98.83%
71.0	18.661	1.966	2611.547	0.07%	98.91%
72.0	18.025	1.908	2613.454	0.07%	98.98%
73.0	17.423	1.854	2615.308	0.07%	99.05%
74.0	16.869	1.803	2617.111	0.06%	99.12%
75.0	16.399	1.758	2618.869	0.06%	99.18%

Zonal flux distribution table

γ(°)	Average I(cd)	Zonal F(lm)	Sum F(lm)	Eff Flux(%)	Eff Sum(%)
76.0	15.886	1.714	2620.582	0.06%	99.25%
77.0	15.409	1.669	2622.251	0.06%	99.31%
78.0	14.925	1.624	2623.875	0.06%	99.37%
79.0	14.489	1.580	2625.455	0.06%	99.43%
80.0	14.032	1.538	2626.993	0.05%	99.49%
81.0	13.638	1.496	2628.489	0.05%	99.55%
82.0	13.243	1.458	2629.947	0.05%	99.60%
83.0	12.842	1.418	2631.365	0.05%	99.66%
84.0	12.510	1.381	2632.746	0.05%	99.71%
85.0	12.205	1.349	2634.095	0.05%	99.76%
86.0	11.908	1.318	2635.413	0.05%	99.81%
87.0	11.652	1.289	2636.702	0.05%	99.86%
88.0	11.410	1.263	2637.966	0.04%	99.91%
89.0	11.202	1.239	2639.205	0.04%	99.95%
90.0	11.147	1.225	2640.43	0.04%	100.00%

Zonal flux distribution table

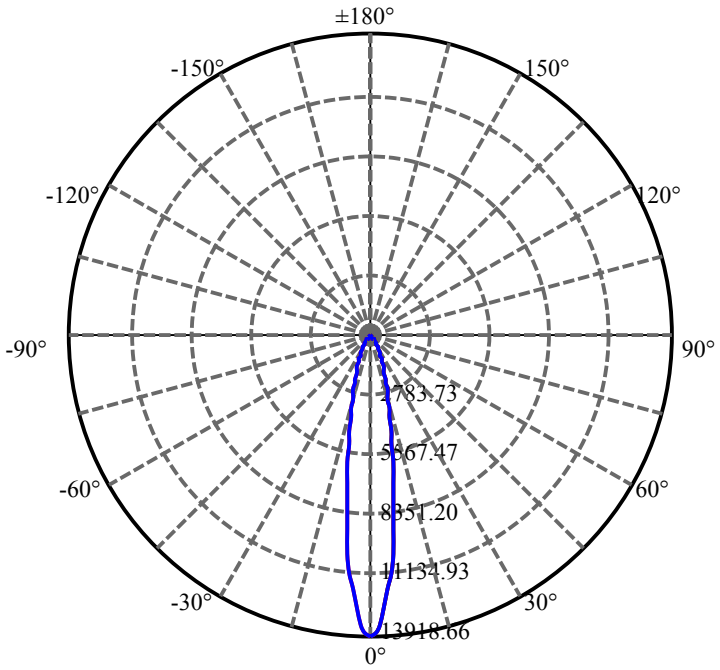
ZONAL LUMEN SUMMARY

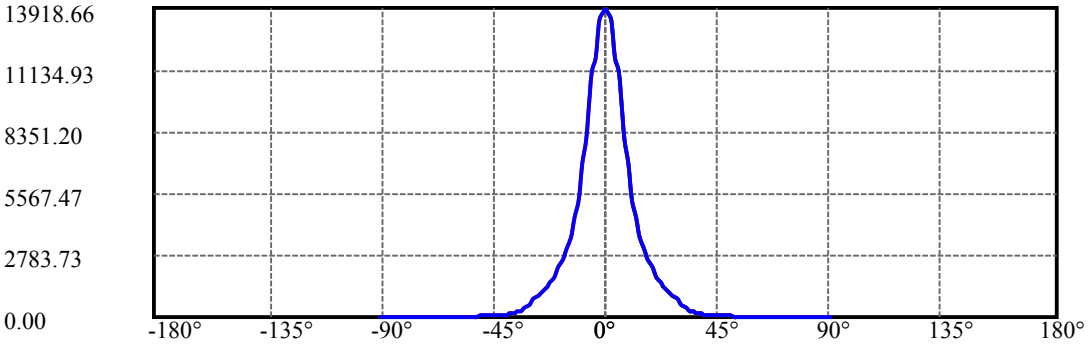
Zone	Lumens	%Lamp	%Fixt
0-30	2332.67	83.01%	88.34%
0-40	2503.85	89.11%	94.83%
0-60	2585.97	92.03%	97.94%
0-90	2639.20	93.92%	99.95%
0-120	2639.20	93.92%	99.95%
0-180	2640.43	93.97%	100.00%
60-90	53.23	1.89%	2.02%
90-120	0.00	0.00%	0.00%
90-130	0.00	0.00%	0.00%
90-150	0.00	0.00%	0.00%
90-180	0.00	0.00%	0.00%
0-25.17	2112.34	75.17%	80.00%

ZONAL LUMEN SUMMARY

0-10	881.98
10-20	912.18
20-30	538.51
30-40	171.18
40-50	51.89
50-60	30.23
60-70	23.61
70-80	17.41
80-90	12.21
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):

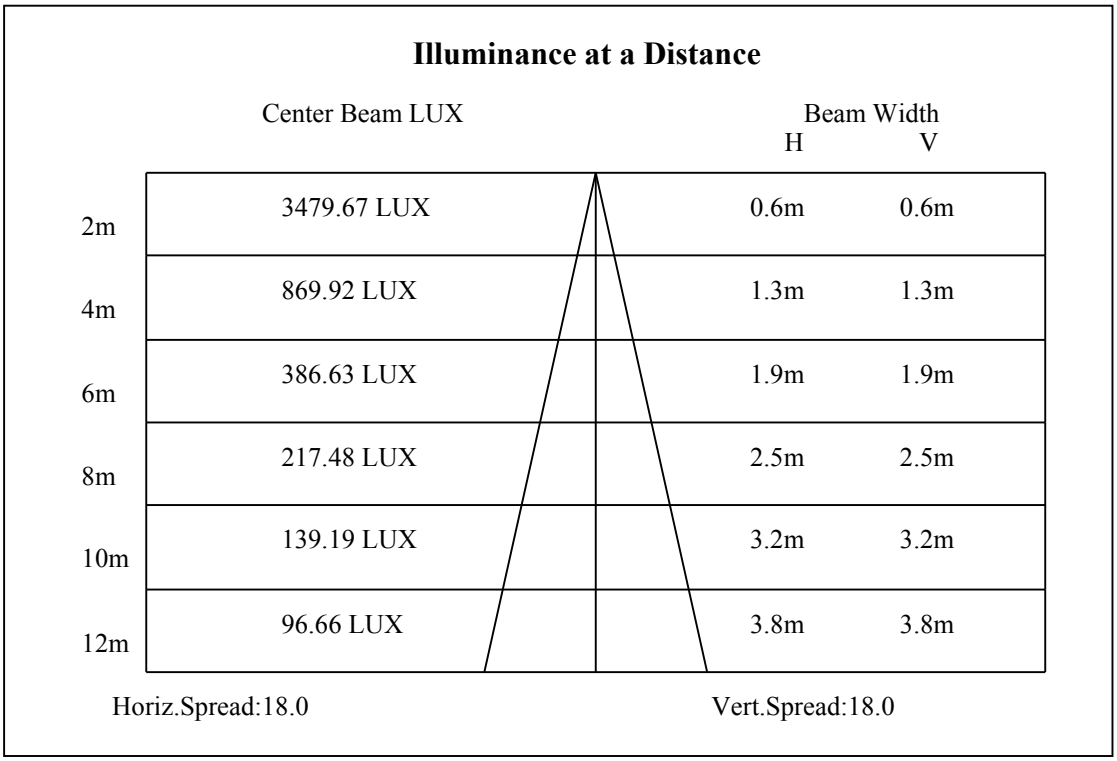
C0/C180:

C90/C270:

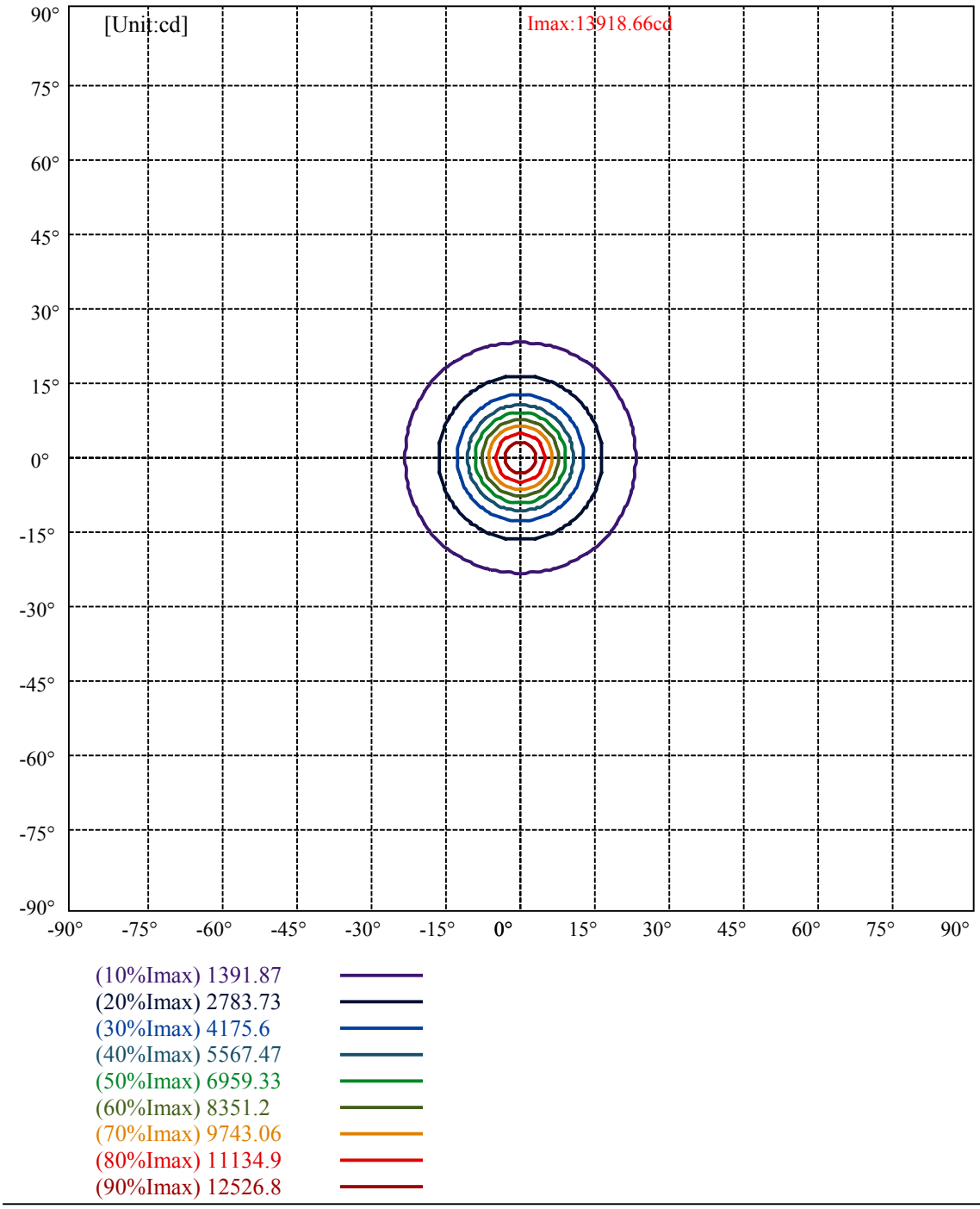
Field angle(10%Imax):C0/180Left:22.9 Right:22.9
:C90/270Left:22.9 Right:22.9

Beam Angle(50%Imax):C0/180Left:9.0 Right:9.0
:C90/270Left:9.0 Right:9.0

Lux distance Curve



ISO-Intensity(V-H)

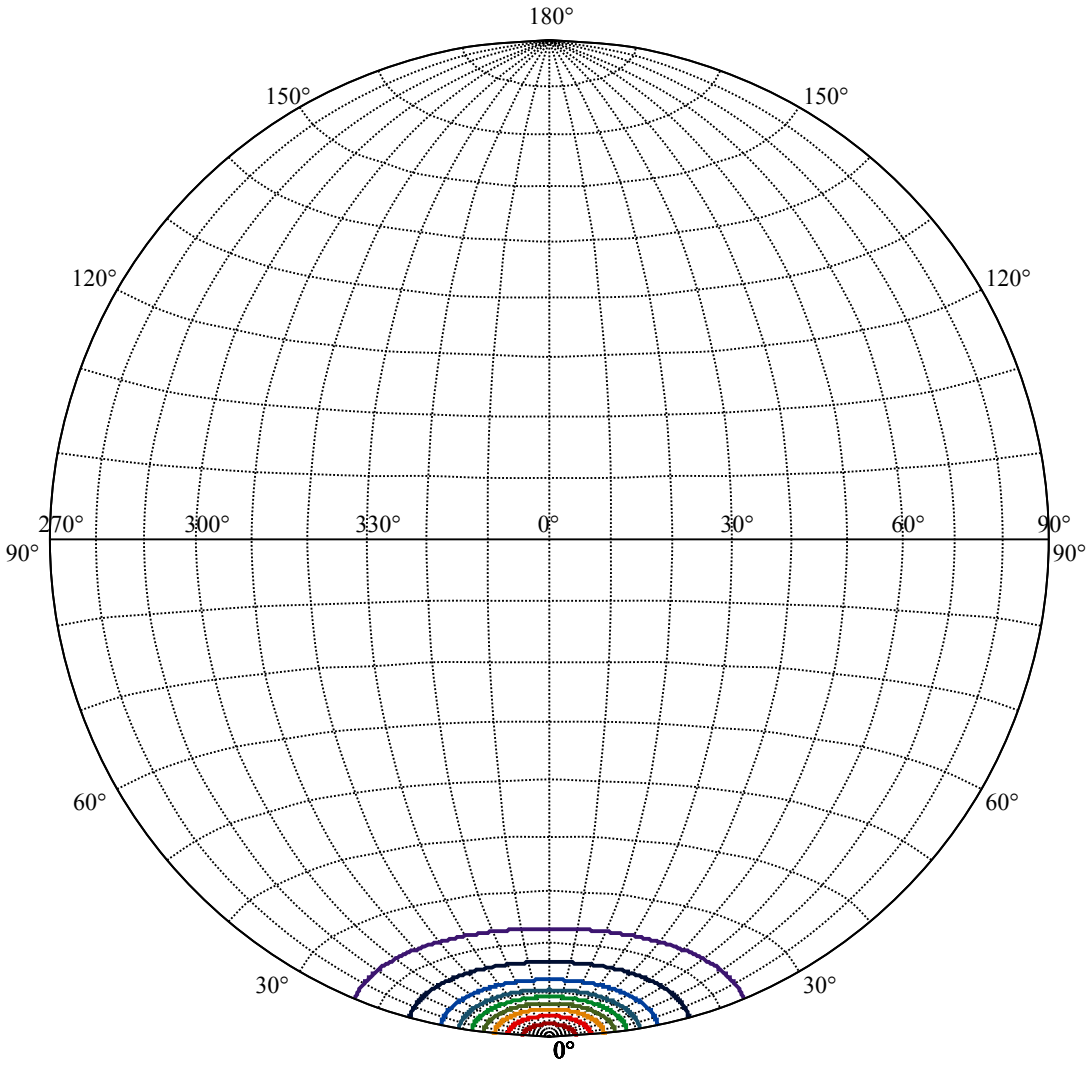


Equipment: GMS1980
Temperature(°C): 0.0

Date: 2023/10/23
Humidity(%): 0.0%

Operator: NT07
Distance(m): 7.44

ISO candela diagram on circular web



House [Unit:cd] Road

Imax:13918.66

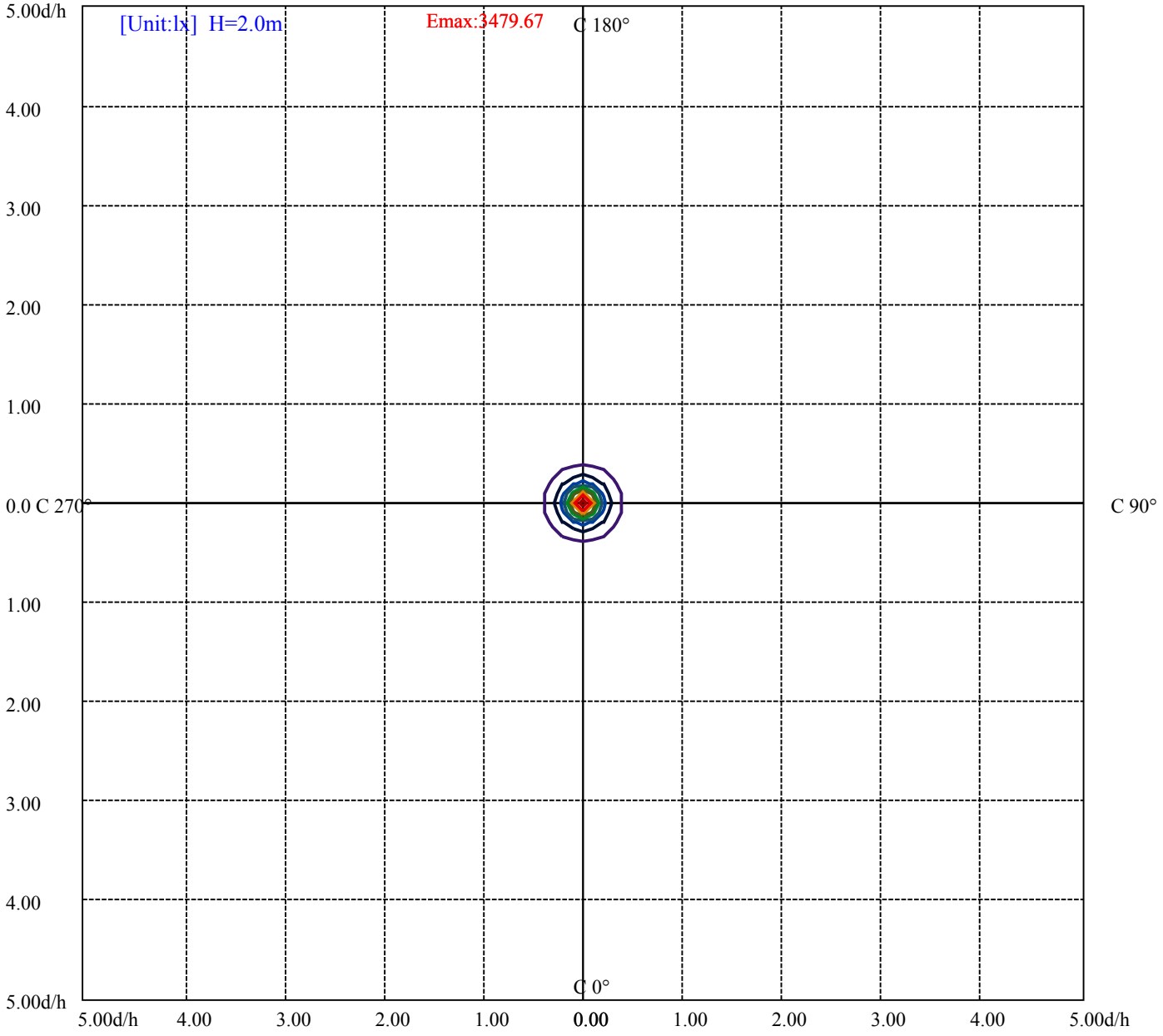
(10%Imax) 1391.87
(20%Imax) 2783.73
(30%Imax) 4175.6
(40%Imax) 5567.47
(50%Imax) 6959.33
(60%Imax) 8351.2
(70%Imax) 9743.06
(80%Imax) 11134.9
(90%Imax) 12526.8

Equipment: GMS1980
Temperature(°C): 0.0

Date: 2023/10/23
Humidity(%): 0.0%

Operator: NT07
Distance(m): 7.44

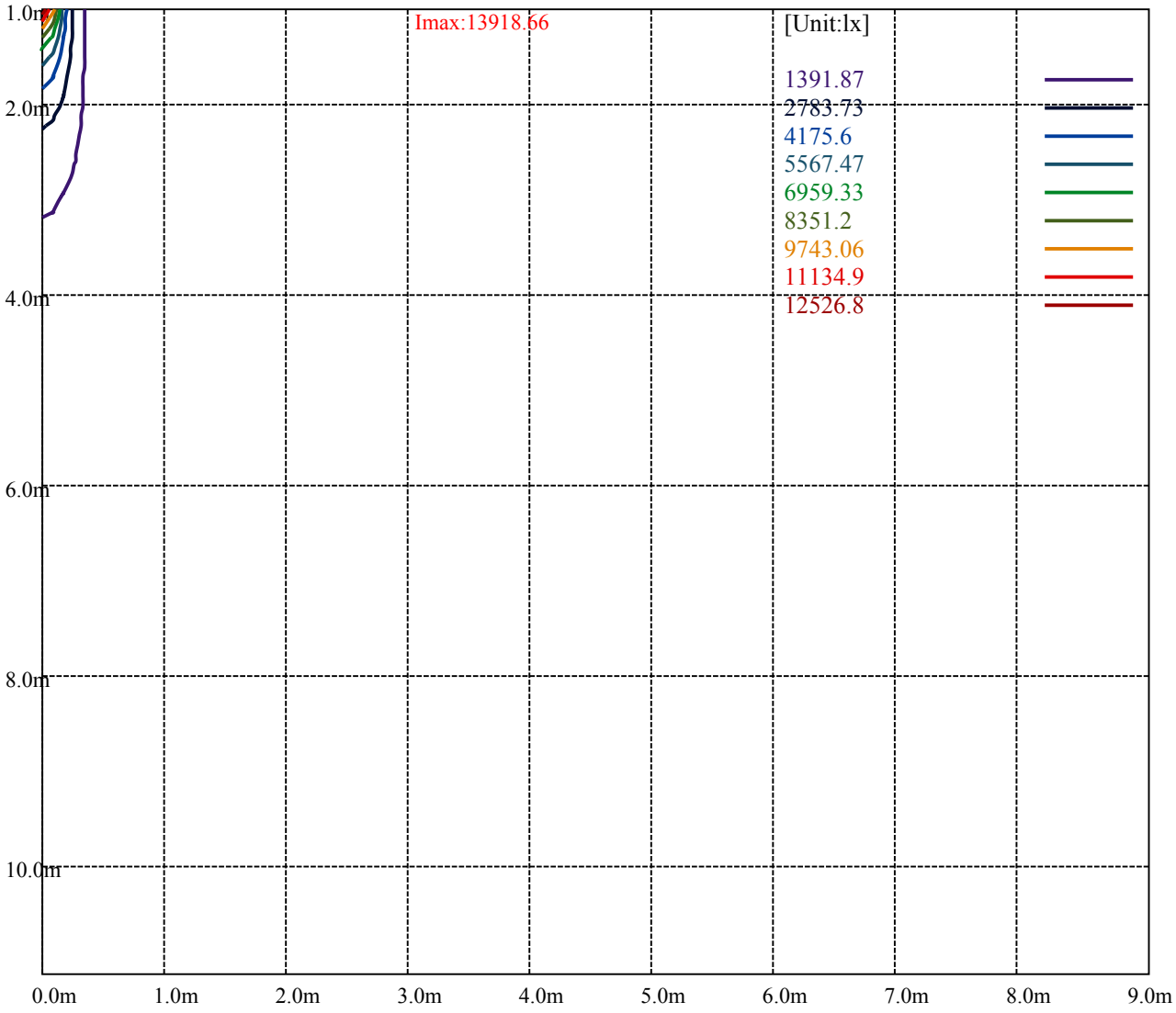
ISO illuminance diagram



(10%Emax) 347.965
(20%Emax) 695.9325
(30%Emax) 1043.897
(40%Emax) 1391.865
(50%Emax) 1739.83
(60%Emax) 2087.795
(70%Emax) 2435.762
(80%Emax) 2783.725
(90%Emax) 3131.7

Equipment: GMS1980
Temperature(°C): 0.0
Date: 2023/10/23
Humidity(%): 0.0%
Operator: NT07
Distance(m): 7.44

Space ISO Lux diagram



Equipment: GMS1980
Temperature(°C): 0.0

Date: 2023/10/23
Humidity(%): 0.0%

Operator: NT07
Distance(m): 7.44

Luminance Limitting Curve(no luminous side)

Luminance Table

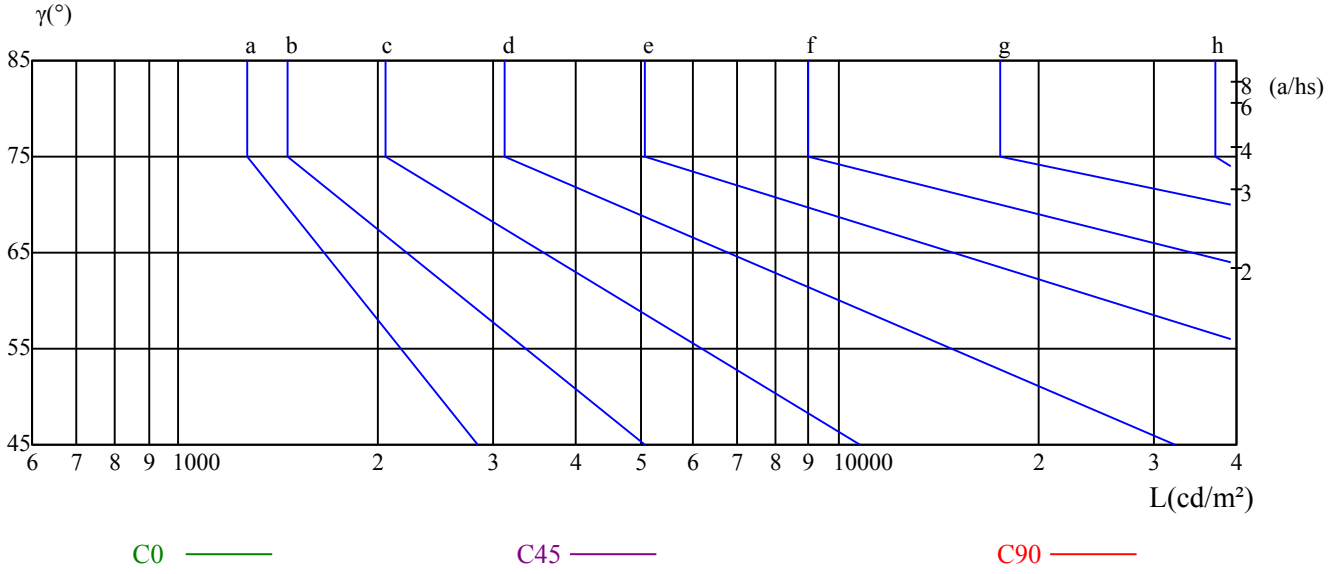
γ	45	50	55	60	65	70	75	80	85
C0	0	0	0	0	0	0	0	0	0
C45	0	0	0	0	0	0	0	0	0
C90	0	0	0	0	0	0	0	0	0

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

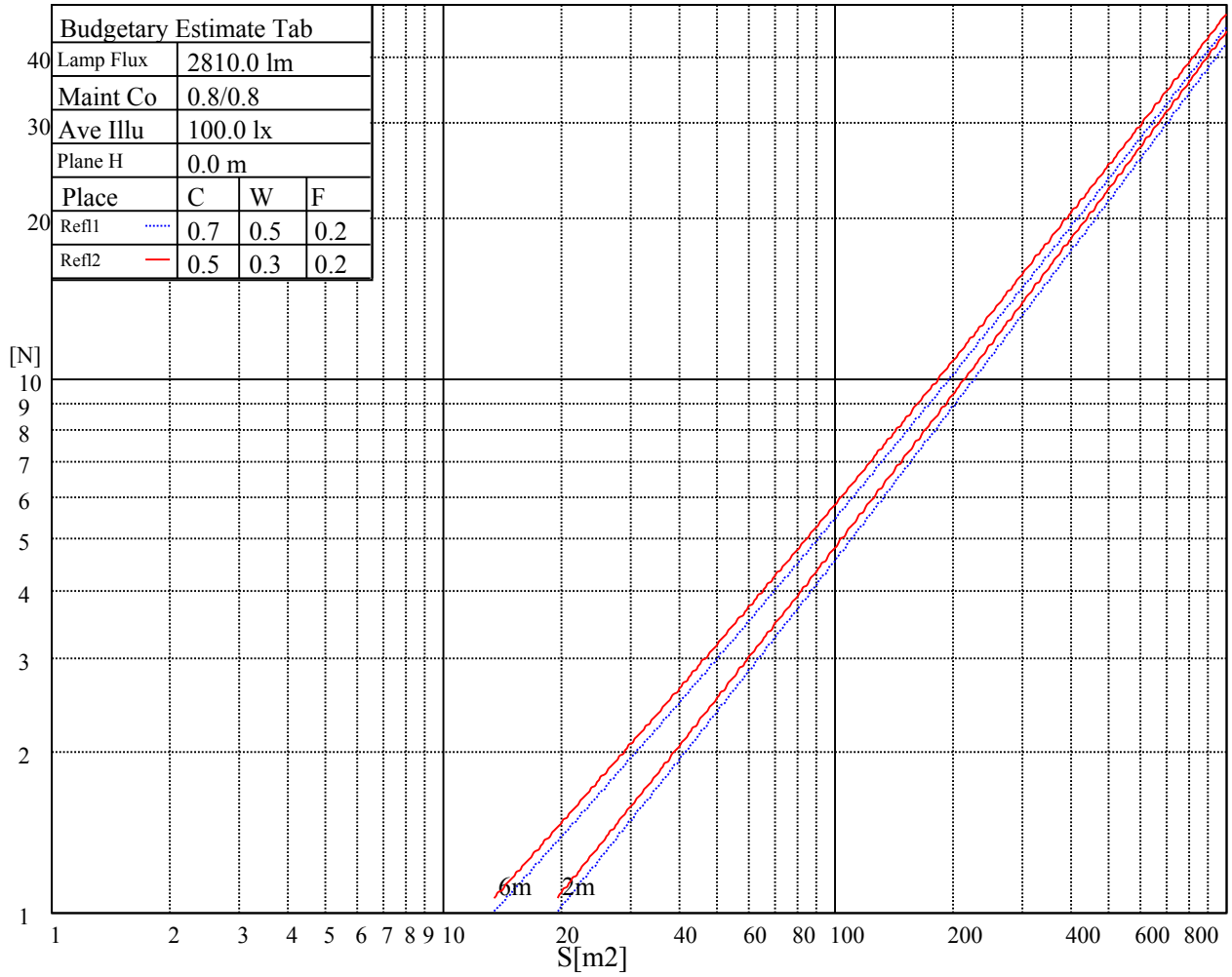
Luminance Limitting Curve



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

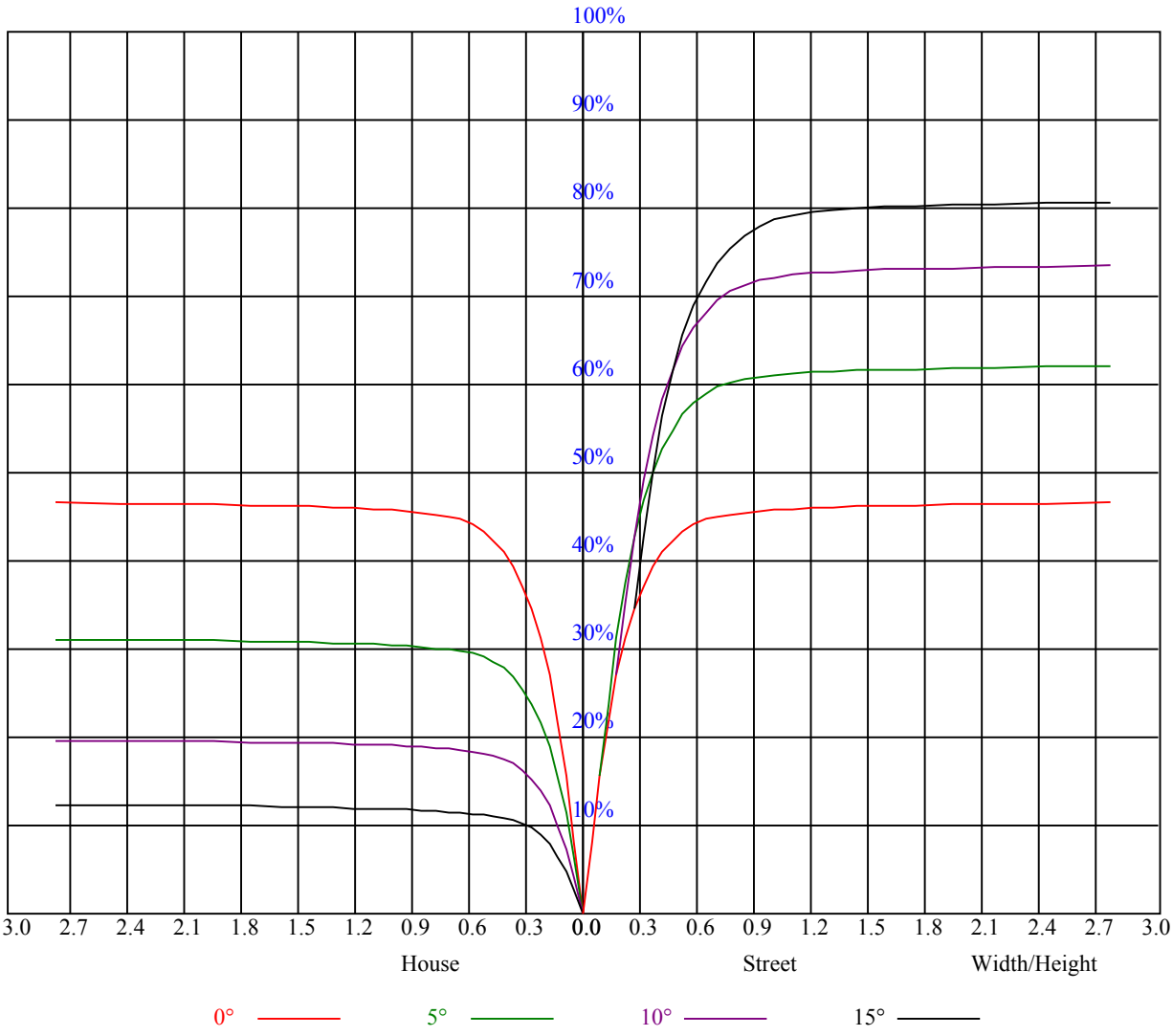


Equipment: GMS1980 Date: 2023/10/23 Operator: NT07
Temperature(°C): 0.0 Humidity(%): 0.0% Distance(m): 7.44

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	1.12	1.12	1.12	1.09	1.09	1.09	1.04	1.04	1.04	1.00	1.00	1.00	0.96	0.96	0.96	0.94
1	1.05	1.03	1.01	1.03	1.01	1.00	0.99	0.98	0.97	0.96	0.95	0.94	0.93	0.92	0.91	0.89
2	0.99	0.96	0.94	0.98	0.95	0.93	0.95	0.93	0.91	0.92	0.90	0.89	0.90	0.88	0.87	0.85
3	0.95	0.91	0.88	0.93	0.90	0.87	0.91	0.88	0.86	0.89	0.86	0.84	0.87	0.85	0.83	0.82
4	0.90	0.86	0.83	0.89	0.85	0.82	0.87	0.84	0.82	0.86	0.83	0.81	0.84	0.82	0.80	0.79
5	0.87	0.82	0.79	0.86	0.82	0.79	0.84	0.81	0.78	0.83	0.80	0.77	0.81	0.79	0.77	0.76
6	0.83	0.79	0.76	0.82	0.78	0.75	0.81	0.78	0.75	0.80	0.77	0.74	0.79	0.76	0.74	0.73
7	0.80	0.76	0.73	0.79	0.75	0.72	0.78	0.75	0.72	0.77	0.74	0.72	0.76	0.74	0.71	0.70
8	0.77	0.73	0.70	0.77	0.73	0.70	0.76	0.72	0.70	0.75	0.72	0.69	0.74	0.71	0.69	0.68
9	0.75	0.70	0.68	0.74	0.70	0.68	0.74	0.70	0.67	0.73	0.69	0.67	0.72	0.69	0.67	0.66
10	0.72	0.68	0.65	0.72	0.68	0.65	0.71	0.68	0.65	0.71	0.67	0.65	0.70	0.67	0.65	0.64

Coefficient Utilization Curve



Equipment: GMS1980	Date: 2023/10/23	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	13744.30	13212.90	12089.23	10831.04	10580.29	9578.39	8564.31	7550.78	6379.50
45.0	13998.93	13849.47	13401.11	12814.36	11834.60	10893.59	9897.22	8851.04	7555.77
90.0	13910.36	13500.74	12936.14	10813.33	10813.33	10031.73	9006.58	7717.95	6729.34
135.0	14021.07	13954.64	13683.41	13157.55	12255.29	11314.28	10323.45	9310.48	8009.67
180.0	13744.30	13949.11	13987.85	13722.16	13273.79	12410.28	11541.23	10544.86	9520.82
225.0	13998.93	13926.97	13545.03	13046.84	11026.99	11026.99	10281.38	9251.80	8220.56
270.0	13910.36	14010.00	13888.22	13450.92	12891.85	12194.40	11369.63	10173.99	9177.63
315.0	14021.07	13816.26	13423.25	12875.25	10829.38	10829.38	10094.28	8822.81	7796.55
360.0	13744.30	13212.90	12089.23	10831.04	10580.29	9578.39	8564.31	7550.78	6379.50

C/γ(°)	9.0	10.0	11.0	12.0	13.0	14.0	15.0	16.0	17.0
0.0	5567.47	4877.21	4302.64	3721.98	3346.13	3028.95	2682.44	2442.20	2232.41
45.0	6598.15	5745.70	4865.58	4284.37	3808.33	3415.32	3094.27	2806.43	2806.43
90.0	5835.38	5088.66	4331.42	3844.86	3437.46	3109.21	2751.07	2498.11	2228.54
135.0	7013.30	5895.16	5142.35	4522.39	3891.36	3481.74	3144.08	2845.18	2845.18
180.0	8231.08	7229.18	6277.10	5441.26	4577.74	4051.88	3631.20	3177.30	2889.46
225.0	7210.36	6045.72	5259.70	4612.06	4081.77	3560.90	3212.72	2911.05	2590.55
270.0	8159.12	7184.90	6050.15	5286.27	4633.10	3990.99	3592.45	3232.65	2861.78
315.0	6815.14	5736.29	5023.34	4434.38	3836.56	3441.33	3114.75	2830.78	2511.95
360.0	5567.47	4877.21	4302.64	3721.98	3346.13	3028.95	2682.44	2442.20	2232.41

C/γ(°)	18.0	19.0	20.0	21.0	22.0	23.0	24.0	25.0	26.0
0.0	1998.26	1828.33	1668.36	1479.05	1348.97	1099.99	1099.99	1029.58	931.55
45.0	2230.75	2044.76	1868.74	1666.70	1518.35	1386.61	1257.63	1159.10	1059.47
90.0	2037.01	1859.88	1655.07	1505.06	1376.64	1094.01	1094.01	1044.63	946.10
135.0	2308.80	2111.19	1931.29	1722.05	1565.95	1424.25	1312.99	1189.55	1084.38
180.0	2823.03	2547.93	2149.38	1963.39	1751.39	1594.18	1448.60	1329.04	1210.03
225.0	2361.94	2109.53	1928.52	1763.57	1609.68	1435.87	1322.40	1080.61	1080.61
270.0	2861.78	2582.80	2116.17	1933.50	1759.69	1603.04	1423.69	1309.67	1217.23
315.0	2284.44	2087.38	1905.27	1693.82	1537.17	1395.46	1092.90	1092.90	1068.27
360.0	1998.26	1828.33	1668.36	1479.05	1348.97	1099.99	1099.99	1029.58	931.55

C/γ(°)	27.0	28.0	29.0	30.0	31.0	32.0	33.0	34.0	35.0
0.0	832.91	732.11	607.84	511.85	419.91	314.24	242.89	190.53	154.88
45.0	955.40	823.66	725.69	627.16	531.95	416.26	331.57	293.93	293.93
90.0	818.18	720.81	627.16	533.72	421.91	337.93	265.14	209.46	168.83
135.0	954.30	850.23	746.17	621.07	524.75	432.31	347.07	290.05	290.05
180.0	1114.27	1015.74	913.33	783.25	682.51	580.11	480.47	368.10	291.16
225.0	1004.56	898.28	792.94	662.80	561.73	464.25	352.71	276.93	217.98
270.0	1121.46	994.70	890.64	788.79	662.58	564.61	468.29	359.80	283.96
315.0	947.88	852.33	755.02	633.36	537.43	445.04	361.51	267.41	207.47
360.0	832.91	732.11	607.84	511.85	419.91	314.24	242.89	190.53	154.88

C/γ(°)	36.0	37.0	38.0	39.0	40.0	41.0	42.0	43.0	44.0
0.0	138.72	124.77	109.38	98.92	89.51	79.27	72.24	66.04	60.78
45.0	163.24	146.30	127.31	114.31	102.96	90.72	82.42	74.84	68.36
90.0	151.12	131.24	117.07	105.06	91.89	83.36	75.56	68.86	61.89
135.0	170.10	152.78	133.96	120.45	108.60	95.87	87.35	79.65	71.57
180.0	291.16	178.85	159.09	139.55	125.27	112.42	101.02	89.23	80.98
225.0	174.09	155.16	139.60	122.28	110.38	99.69	90.45	80.32	73.51
270.0	283.96	167.50	148.68	133.35	117.24	106.06	95.93	87.40	77.77
315.0	167.72	145.91	127.42	114.58	103.35	91.17	83.03	75.61	67.92
360.0	138.72	124.77	109.38	98.92	89.51	79.27	72.24	66.04	60.78

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	54.74	50.87	47.60	44.34	40.96	38.69	36.15	34.32	32.82
45.0	61.50	56.35	52.42	48.82	44.56	41.79	39.58	36.70	34.76
90.0	56.74	52.86	49.43	45.28	42.57	40.24	37.70	35.81	34.26
135.0	66.04	60.61	55.19	51.59	48.21	44.73	42.23	39.91	37.86
180.0	73.90	68.08	61.44	56.63	52.75	48.43	45.39	42.79	39.74
225.0	67.48	62.00	56.02	52.14	48.66	44.78	42.01	38.91	36.81
270.0	71.24	65.59	60.17	54.52	50.87	46.55	43.62	41.07	38.19
315.0	62.77	57.73	52.36	48.99	45.78	42.79	39.80	37.70	35.65
360.0	54.74	50.87	47.60	44.34	40.96	38.69	36.15	34.32	32.82

C/γ(°)	54.0	55.0	56.0	57.0	58.0	59.0	60.0	61.0	62.0
0.0	31.16	30.00	29.01	28.29	27.46	26.79	26.18	25.63	24.74
45.0	32.94	31.55	30.33	29.17	28.51	27.84	27.12	26.29	25.74
90.0	32.55	31.33	30.11	29.28	28.67	28.01	27.29	26.85	26.24
135.0	35.87	34.10	32.77	31.66	30.50	29.67	28.67	28.12	27.68
180.0	37.59	35.43	33.93	32.60	31.39	30.28	29.45	28.62	27.95
225.0	35.09	33.54	31.77	30.67	29.72	28.84	27.90	27.23	26.79
270.0	36.15	34.49	33.05	31.50	30.39	29.56	28.78	27.84	27.23
315.0	34.04	32.38	31.27	29.95	29.06	28.40	27.57	26.79	26.24
360.0	31.16	30.00	29.01	28.29	27.46	26.79	26.18	25.63	24.74

C/γ(°)	63.0	64.0	65.0	66.0	67.0	68.0	69.0	70.0	71.0
0.0	23.91	23.08	22.03	21.09	20.09	19.26	18.49	17.93	17.21
45.0	25.02	24.02	23.47	22.31	21.37	20.43	19.60	18.65	17.93
90.0	25.24	24.24	23.36	22.31	21.48	20.37	19.54	18.65	18.10
135.0	26.74	25.85	25.08	24.02	22.69	21.92	20.98	20.09	19.32
180.0	27.29	26.63	25.74	24.69	23.86	22.69	21.75	20.81	19.93
225.0	26.24	24.96	24.19	23.03	22.03	21.31	20.20	19.43	18.82
270.0	26.68	25.79	24.85	24.02	22.97	22.09	21.31	20.26	19.54
315.0	25.35	24.36	23.53	22.64	21.70	20.70	19.98	19.21	18.43
360.0	23.91	23.08	22.03	21.09	20.09	19.26	18.49	17.93	17.21

C/γ(°)	72.0	73.0	74.0	75.0	76.0	77.0	78.0	79.0	80.0
0.0	16.72	16.27	15.89	15.39	15.00	14.61	14.17	13.78	13.51
45.0	17.33	16.83	16.27	15.83	15.44	15.11	14.61	14.28	13.89
90.0	17.49	16.94	16.44	16.00	15.50	14.95	14.50	14.00	13.62
135.0	18.60	17.88	17.27	16.72	16.16	15.55	15.11	14.56	14.12
180.0	19.15	18.43	17.77	17.27	16.61	16.11	15.61	15.17	14.56
225.0	18.16	17.44	16.94	16.44	15.94	15.39	14.89	14.50	13.95
270.0	18.88	18.32	17.60	17.16	16.61	16.11	15.50	15.06	14.56
315.0	17.88	17.27	16.77	16.38	15.83	15.44	15.00	14.56	14.06
360.0	16.72	16.27	15.89	15.39	15.00	14.61	14.17	13.78	13.51

C/γ(°)	81.0	82.0	83.0	84.0	85.0	86.0	87.0	88.0	89.0
0.0	13.12	12.84	12.51	12.23	11.90	11.62	11.40	11.13	10.90
45.0	13.56	13.12	12.68	12.40	12.12	11.73	11.57	11.29	10.96
90.0	13.23	12.84	12.45	12.18	11.90	11.62	11.40	11.02	10.96
135.0	13.67	13.28	12.84	12.57	12.23	11.96	11.68	11.62	11.07
180.0	14.17	13.67	13.28	12.84	12.51	12.23	11.90	11.62	11.57
225.0	13.62	13.23	12.79	12.45	12.18	11.90	11.62	11.46	11.40
270.0	14.06	13.67	13.23	12.84	12.45	12.18	11.90	11.62	11.46
315.0	13.67	13.28	12.95	12.57	12.34	12.01	11.73	11.51	11.29
360.0	13.12	12.84	12.51	12.23	11.90	11.62	11.40	11.13	10.90

Intensity data(cd)

C/γ(°)	90.0
0.0	10.96
45.0	10.90
90.0	11.07
135.0	11.51
180.0	11.35
225.0	11.40
270.0	10.96
315.0	11.02
360.0	10.96