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NATA

Client:
LumCAT: 2-2645-L
Luminaire: 92.70.411.00
Report No: 20231023-B005
Ballast type: AC

Test No: 20231023-C005	Voltage(V): 36.570
LampCAT: NICHIA NFDWJ130B-V3	Current(A): 0.576
Lamp flux(lm): 2810.0	Power (W): 21.064
Number of Lamps: 1	PF: 0.000
Length(mm): 0	Width(mm): 0
Phm Type: C	Height(mm): 0

Photometric Results

Lumens(lm): 2624.43, Efficiency(%): 93.40% , Luminous Efficacy(lm/W): 124.59
Central intensity(cd): 5625.586, Maximum intensity(cd): 5625.586
Angle of maximum intensity: C=0.0 γ=0.0
Beam Angle(50%Imax): [C0/180]Total=39.8
[C90/270]Total=39.8
Field angle(10%Imax): [C0/180]Total=63.6
[C90/270]Total=63.6
Maximum s/h(1/2): C0_180=0.65 C90_270=0.65
Maximum s/h(1/4): C0_180=0.63 C90_270=0.63
Up flux rate of lamp(%): 0.00%
Down flux rate of lamp(%): 93.40%
Up flux rate of LUM(%): - -
Down flux rate of LUM(%): 100.00%
CIE Type : Direct lighting
Output flux ratio in π solid angle : 98.221%

Zonal flux distribution table

γ(°)	Average I(cd)	Zonal F(lm)	Sum F(lm)	Eff Flux(%)	Eff Sum(%)
0.0	5625.586	0.000	0	0.00%	0.00%
1.0	5619.774	5.381	5.381	0.19%	0.21%
2.0	5590.229	16.090	21.47	0.57%	0.82%
3.0	5546.016	26.634	48.105	0.95%	1.83%
4.0	5475.786	36.893	84.998	1.31%	3.24%
5.0	5396.353	46.771	131.769	1.66%	5.02%
6.0	5304.397	56.235	188.005	2.00%	7.16%
7.0	5196.319	65.178	253.182	2.32%	9.65%
8.0	5078.416	73.534	326.717	2.62%	12.45%
9.0	4957.192	81.333	408.05	2.89%	15.55%
10.0	4826.211	88.536	496.586	3.15%	18.92%
11.0	4674.127	94.928	591.514	3.38%	22.54%
12.0	4515.124	100.452	691.966	3.57%	26.37%
13.0	4336.401	105.045	797.011	3.74%	30.37%
14.0	4147.714	108.596	905.607	3.86%	34.51%
15.0	3956.468	111.258	1016.865	3.96%	38.75%
16.0	3751.659	112.946	1129.81	4.02%	43.05%
17.0	3507.273	113.041	1242.852	4.02%	47.36%
18.0	3276.933	111.857	1354.708	3.98%	51.62%
19.0	3042.787	109.950	1464.659	3.91%	55.81%
20.0	2792.728	106.806	1571.465	3.80%	59.88%
21.0	2528.206	102.173	1673.637	3.64%	63.77%
22.0	2291.777	96.860	1770.497	3.45%	67.46%
23.0	2045.385	91.005	1861.502	3.24%	70.93%
24.0	1821.341	84.540	1946.043	3.01%	74.15%
25.0	1565.732	77.015	2023.057	2.74%	77.09%
26.0	1389.936	69.769	2092.826	2.48%	79.74%
27.0	1198.039	63.315	2156.142	2.25%	82.16%
28.0	1071.895	57.470	2213.612	2.05%	84.35%
29.0	928.792	52.344	2265.955	1.86%	86.34%
30.0	772.273	45.928	2311.884	1.63%	88.09%
31.0	653.927	39.689	2351.573	1.41%	89.60%
32.0	544.749	34.341	2385.913	1.22%	90.91%
33.0	442.296	29.079	2414.992	1.03%	92.02%
34.0	357.301	24.198	2439.19	0.86%	92.94%
35.0	288.780	20.065	2459.255	0.71%	93.71%
36.0	247.313	17.069	2476.324	0.61%	94.36%
37.0	194.921	14.423	2490.748	0.51%	94.91%

Zonal flux distribution table

γ(°)	Average I(cd)	Zonal F(lm)	Sum F(lm)	Eff Flux(%)	Eff Sum(%)
38.0	152.769	11.605	2502.353	0.41%	95.35%
39.0	113.807	9.099	2511.452	0.32%	95.70%
40.0	92.074	7.180	2518.632	0.26%	95.97%
41.0	75.343	5.962	2524.594	0.21%	96.20%
42.0	63.892	5.059	2529.653	0.18%	96.39%
43.0	54.918	4.401	2534.054	0.16%	96.56%
44.0	48.718	3.912	2537.965	0.14%	96.71%
45.0	43.847	3.557	2541.523	0.13%	96.84%
46.0	40.145	3.285	2544.807	0.12%	96.97%
47.0	36.865	3.063	2547.87	0.11%	97.08%
48.0	34.375	2.880	2550.75	0.10%	97.19%
49.0	32.133	2.731	2553.481	0.10%	97.30%
50.0	30.168	2.598	2556.079	0.09%	97.40%
51.0	28.466	2.481	2558.56	0.09%	97.49%
52.0	27.013	2.381	2560.94	0.08%	97.58%
53.0	25.816	2.298	2563.238	0.08%	97.67%
54.0	24.702	2.227	2565.465	0.08%	97.75%
55.0	23.712	2.161	2567.626	0.08%	97.84%
56.0	22.909	2.107	2569.733	0.07%	97.92%
57.0	22.204	2.063	2571.795	0.07%	97.99%
58.0	21.526	2.022	2573.817	0.07%	98.07%
59.0	20.931	1.985	2575.802	0.07%	98.15%
60.0	20.370	1.951	2577.753	0.07%	98.22%
61.0	19.886	1.921	2579.675	0.07%	98.29%
62.0	19.436	1.895	2581.569	0.07%	98.37%
63.0	18.972	1.868	2583.437	0.07%	98.44%
64.0	18.564	1.842	2585.279	0.07%	98.51%
65.0	18.204	1.820	2587.099	0.06%	98.58%
66.0	17.789	1.796	2588.895	0.06%	98.65%
67.0	17.402	1.770	2590.664	0.06%	98.71%
68.0	17.049	1.745	2592.409	0.06%	98.78%
69.0	16.703	1.722	2594.131	0.06%	98.85%
70.0	16.329	1.696	2595.828	0.06%	98.91%
71.0	15.983	1.670	2597.498	0.06%	98.97%
72.0	15.658	1.645	2599.143	0.06%	99.04%
73.0	15.340	1.621	2600.764	0.06%	99.10%
74.0	15.042	1.597	2602.361	0.06%	99.16%
75.0	14.759	1.575	2603.936	0.06%	99.22%

Zonal flux distribution table

γ(°)	Average I(cd)	Zonal F(lm)	Sum F(lm)	Eff Flux(%)	Eff Sum(%)
76.0	14.468	1.551	2605.487	0.06%	99.28%
77.0	14.164	1.527	2607.014	0.05%	99.34%
78.0	13.838	1.499	2608.513	0.05%	99.39%
79.0	13.534	1.471	2609.984	0.05%	99.45%
80.0	13.230	1.443	2611.426	0.05%	99.50%
81.0	12.946	1.416	2612.842	0.05%	99.56%
82.0	12.634	1.387	2614.229	0.05%	99.61%
83.0	12.351	1.358	2615.587	0.05%	99.66%
84.0	12.074	1.331	2616.918	0.05%	99.71%
85.0	11.825	1.304	2618.222	0.05%	99.76%
86.0	11.603	1.281	2619.503	0.05%	99.81%
87.0	11.417	1.260	2620.763	0.04%	99.86%
88.0	11.216	1.240	2622.003	0.04%	99.91%
89.0	11.057	1.221	2623.223	0.04%	99.95%
90.0	10.988	1.209	2624.432	0.04%	100.00%

Zonal flux distribution table

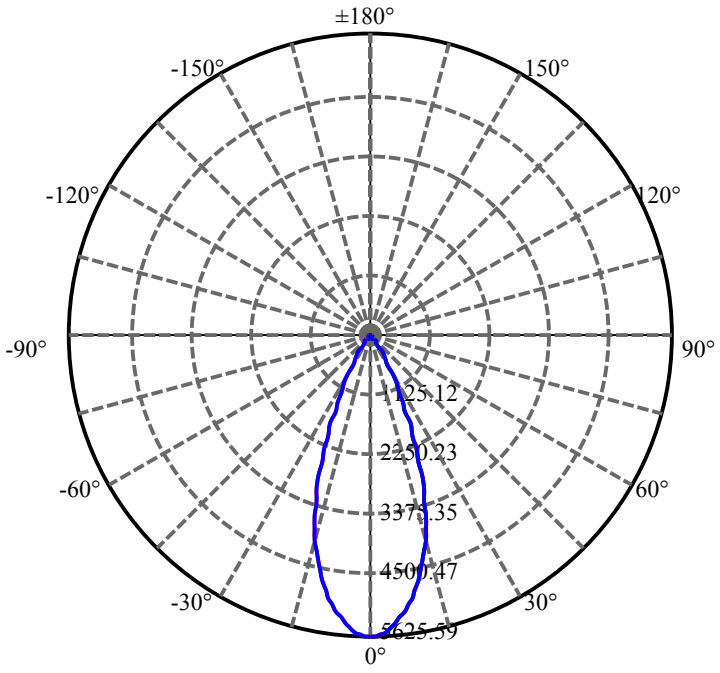
ZONAL LUMEN SUMMARY

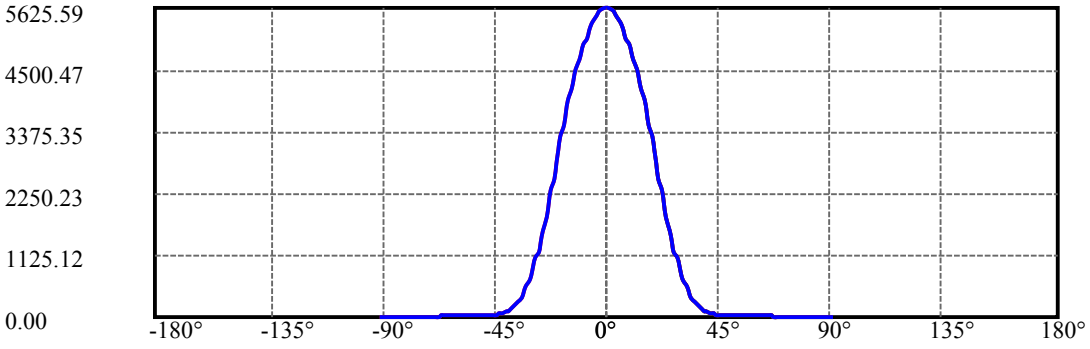
Zone	Lumens	%Lamp	%Fixt
0-30	2311.88	82.27%	88.09%
0-40	2518.63	89.63%	95.97%
0-60	2577.75	91.73%	98.22%
0-90	2623.22	93.35%	99.95%
0-120	2623.22	93.35%	99.95%
0-180	2624.43	93.40%	100.00%
60-90	45.47	1.62%	1.73%
90-120	0.00	0.00%	0.00%
90-130	0.00	0.00%	0.00%
90-150	0.00	0.00%	0.00%
90-180	0.00	0.00%	0.00%
0-26.11	2099.55	74.72%	80.00%

ZONAL LUMEN SUMMARY

0-10	496.59
10-20	1074.88
20-30	740.42
30-40	206.75
40-50	37.45
50-60	21.67
60-70	18.07
70-80	15.60
80-90	11.80
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:31.8 Right:31.8
:C90/270Left:31.8 Right:31.8

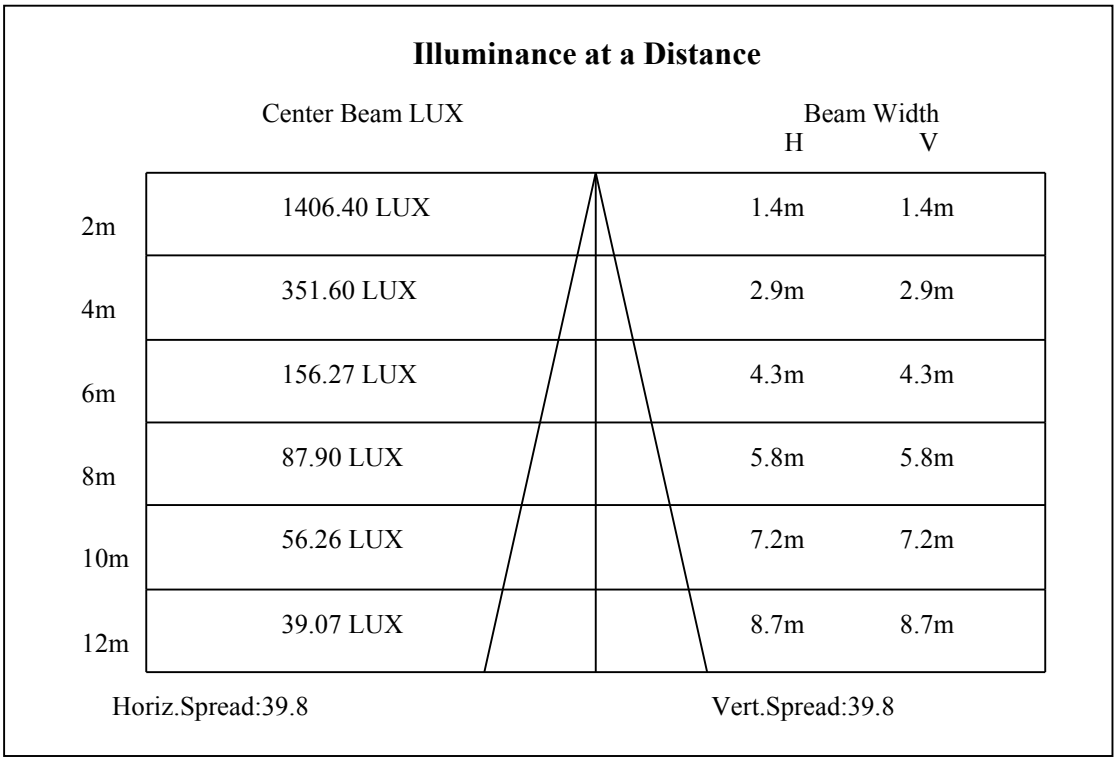
Beam Angle(50%Imax):C0/180Left:19.9 Right:19.9
:C90/270Left:19.9 Right:19.9

Equipment: GMS1980
Temperature(°C): 0.0

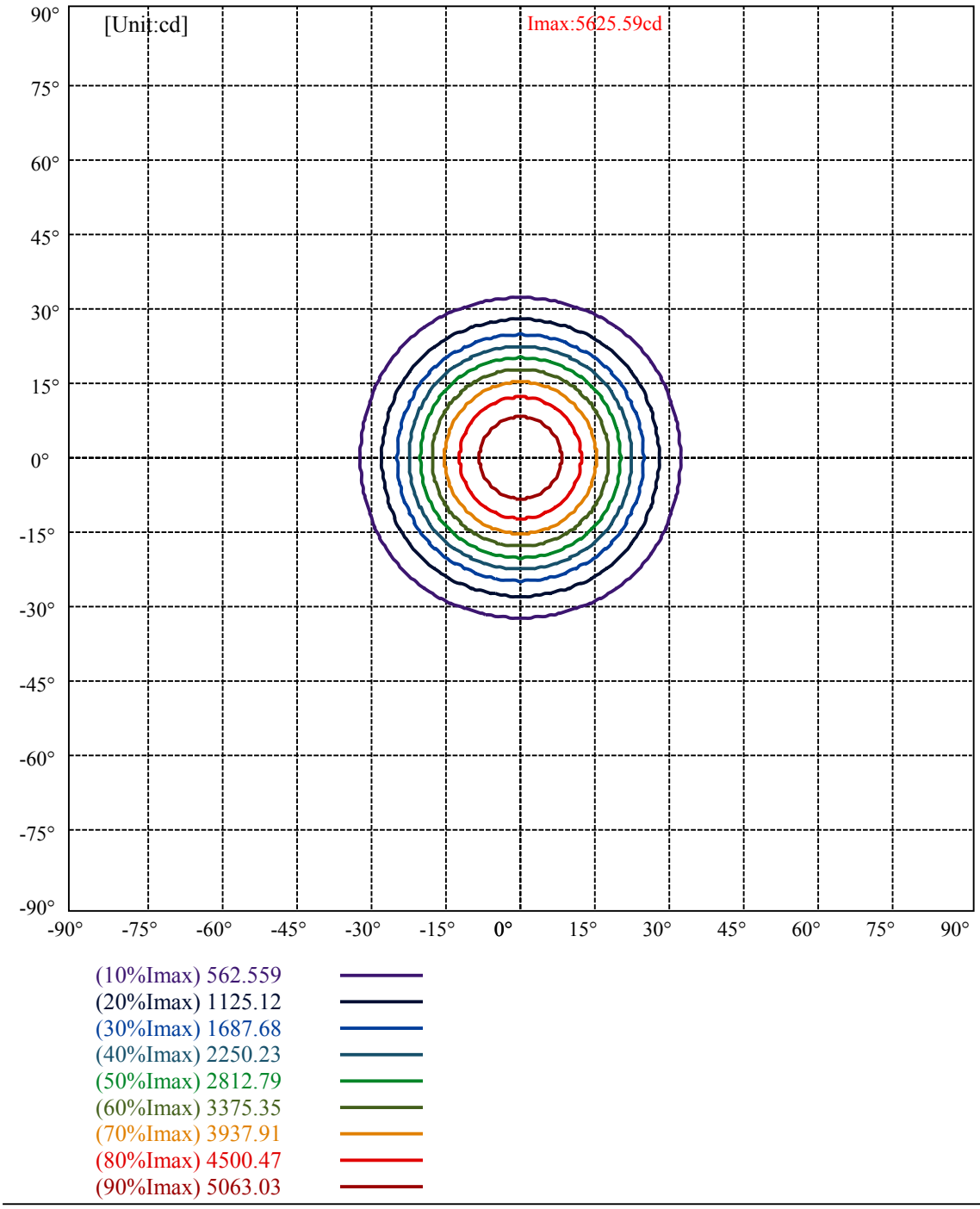
Date: 2023/10/23
Humidity(%): 0.0%

Operator: NT07
Distance(m): 7.44

Lux distance Curve



ISO-Intensity(V-H)

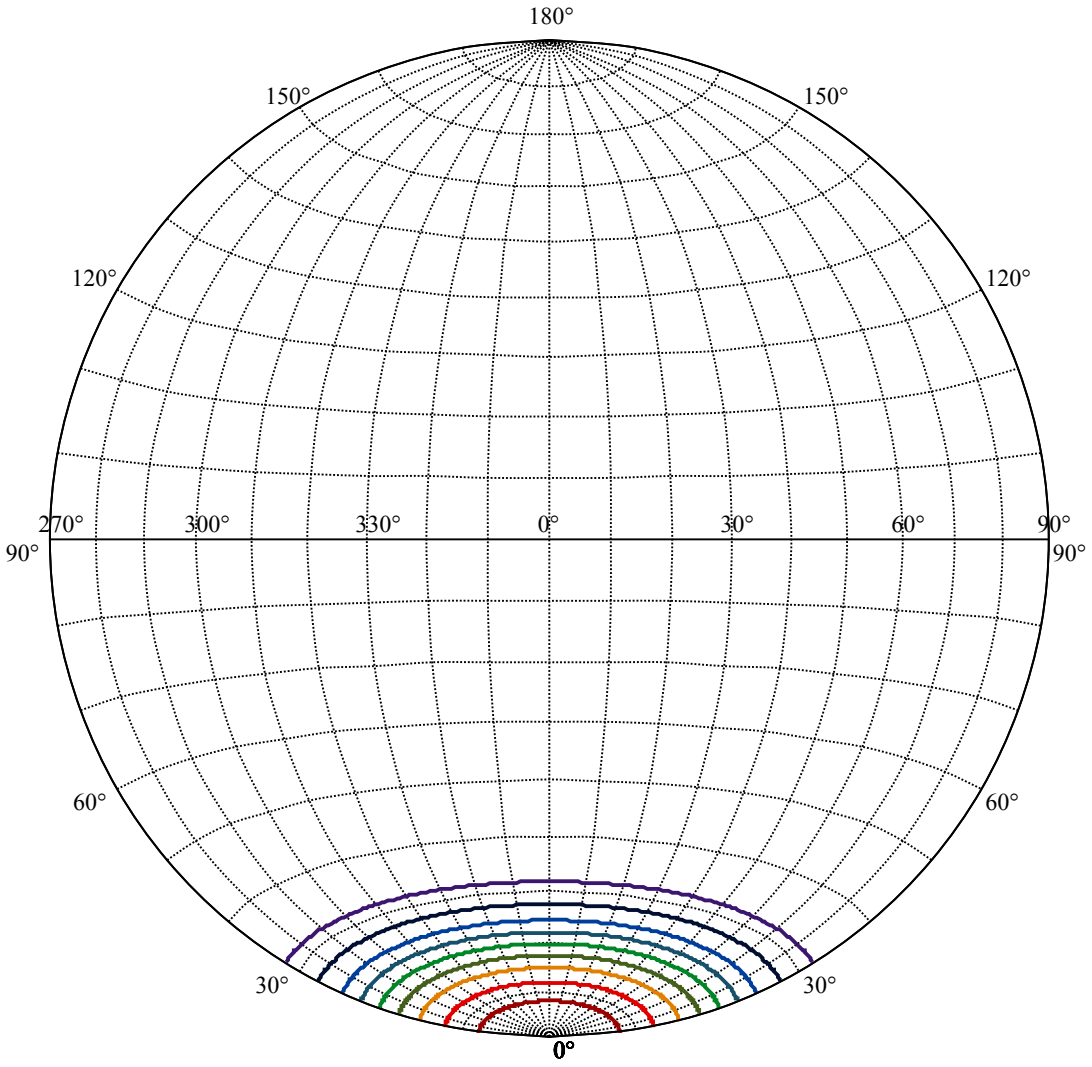


Equipment: GMS1980
Temperature(°C): 0.0

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

Operator: NT07
Distance(m): 7.44

ISO candela diagram on circular web



House [Unit:cd] Road

Imax:5625.59

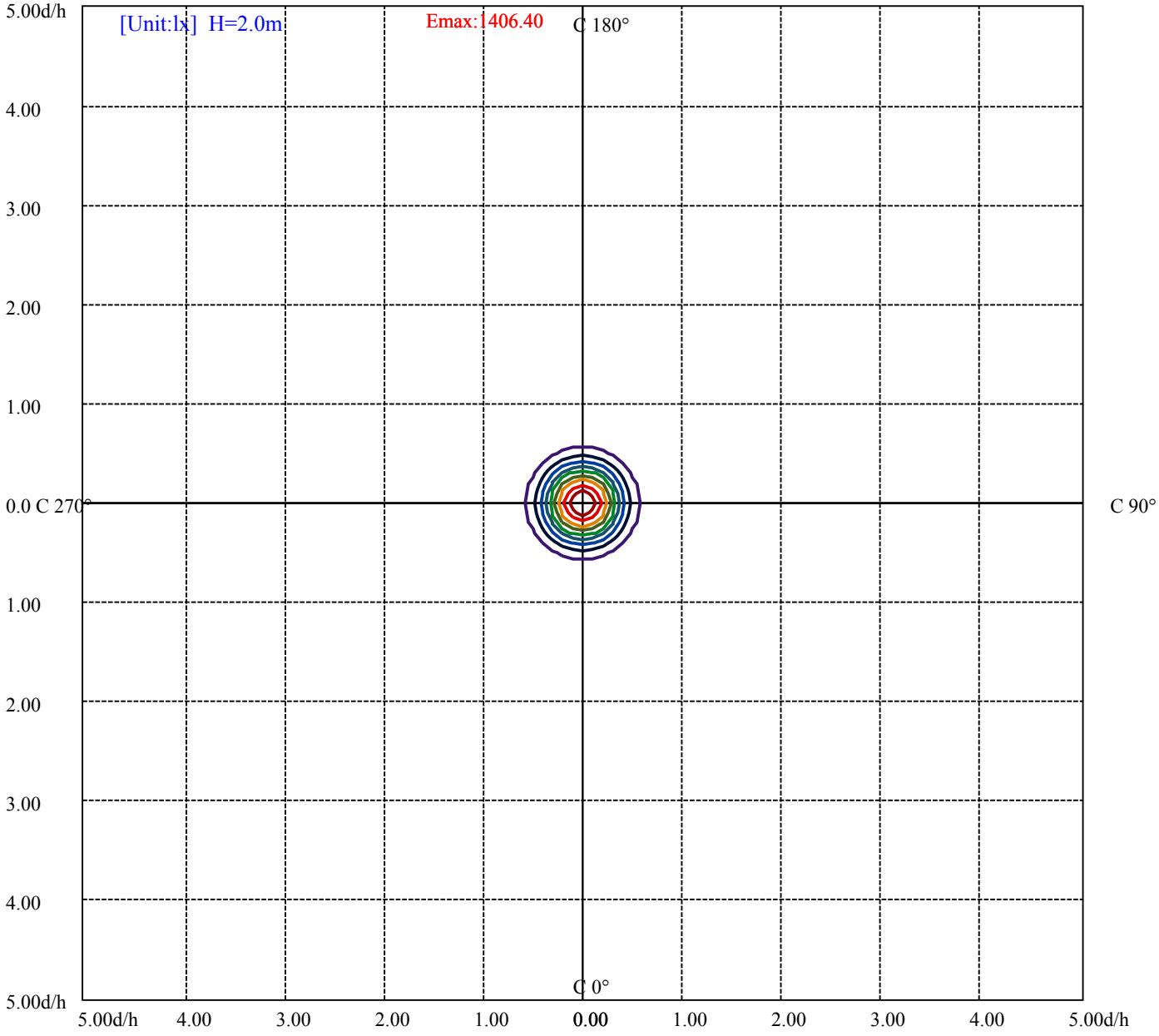
(10%Imax) 562.559
(20%Imax) 1125.12
(30%Imax) 1687.68
(40%Imax) 2250.23
(50%Imax) 2812.79
(60%Imax) 3375.35
(70%Imax) 3937.91
(80%Imax) 4500.47
(90%Imax) 5063.03

Equipment: GMS1980
Temperature(°C): 0.0

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

Operator: NT07
Distance(m): 7.44

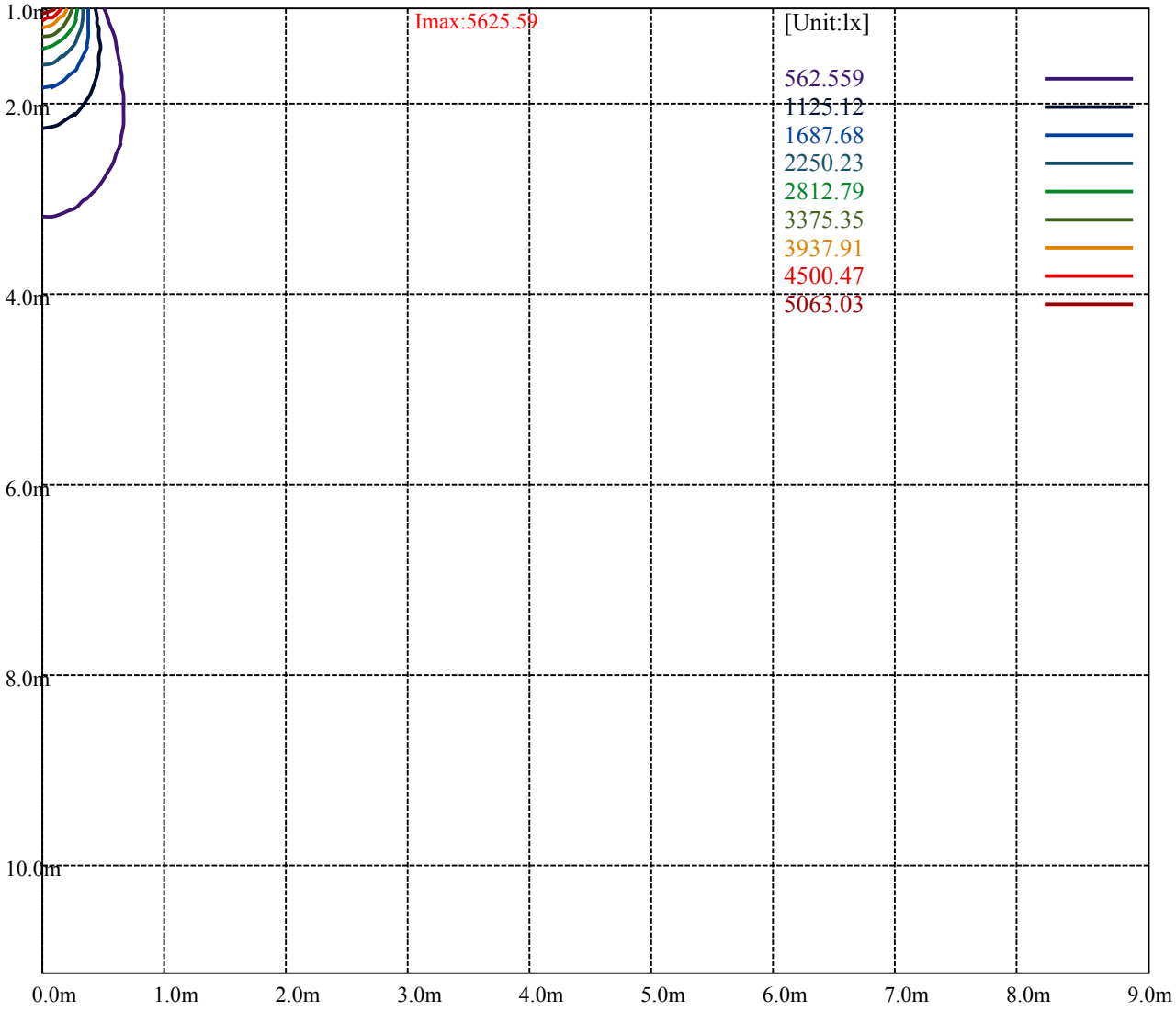
ISO illuminance diagram



(10%Emax) 140.6395
(20%Emax) 281.28
(30%Emax) 421.92
(40%Emax) 562.5575
(50%Emax) 703.1975
(60%Emax) 843.8375
(70%Emax) 984.4775
(80%Emax) 1125.118
(90%Emax) 1265.757

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

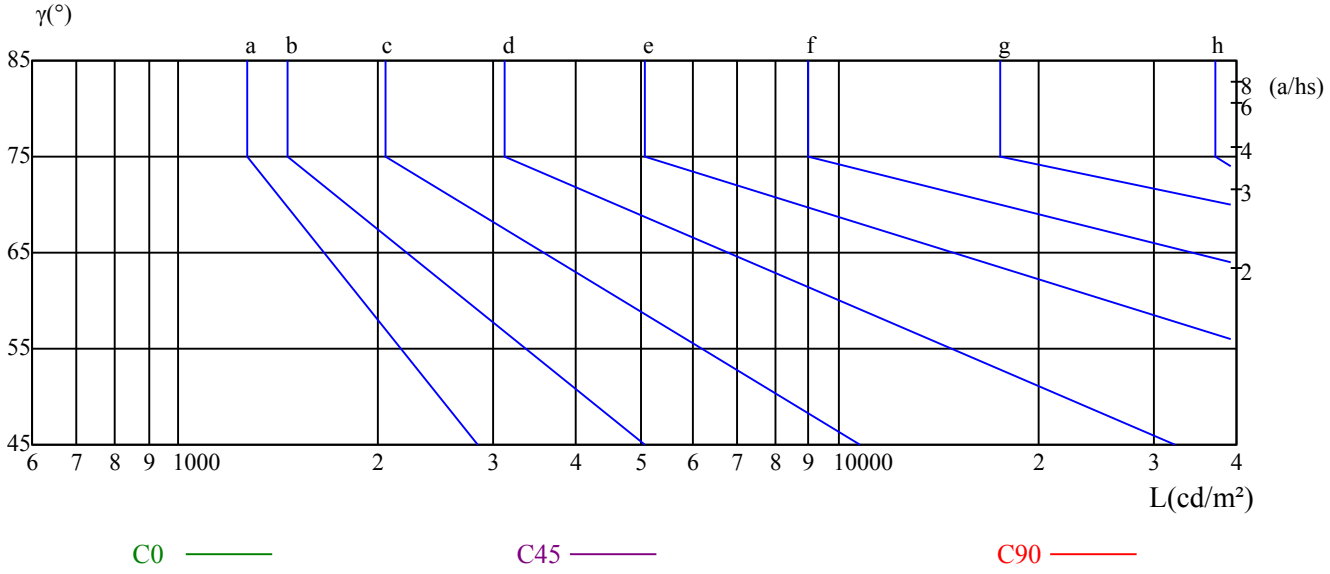
γ	45	50	55	60	65	70	75	80	85
C0	0	0	0	0	0	0	0	0	0
C45	0	0	0	0	0	0	0	0	0
C90	0	0	0	0	0	0	0	0	0

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

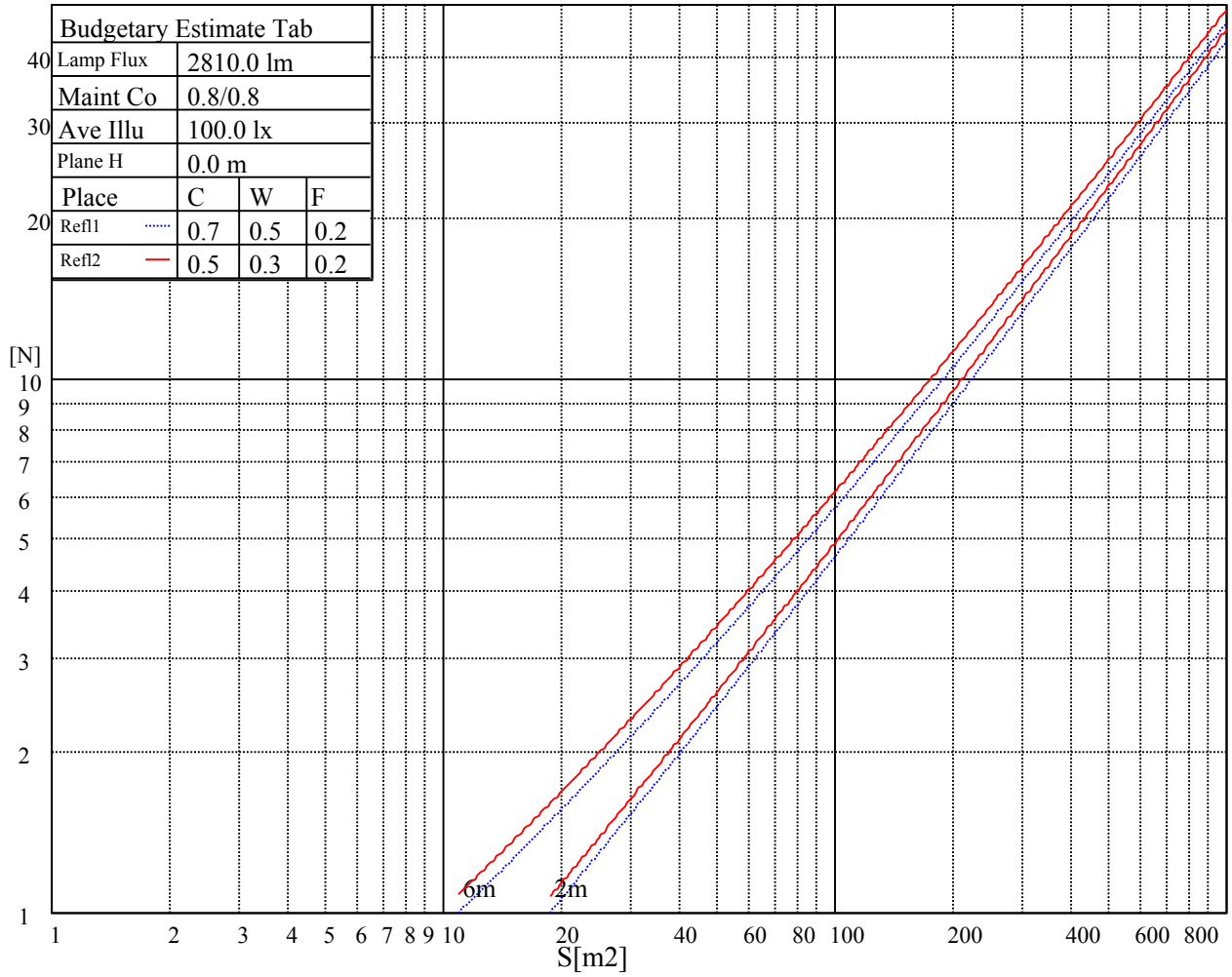
Luminance Limitting Curve



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

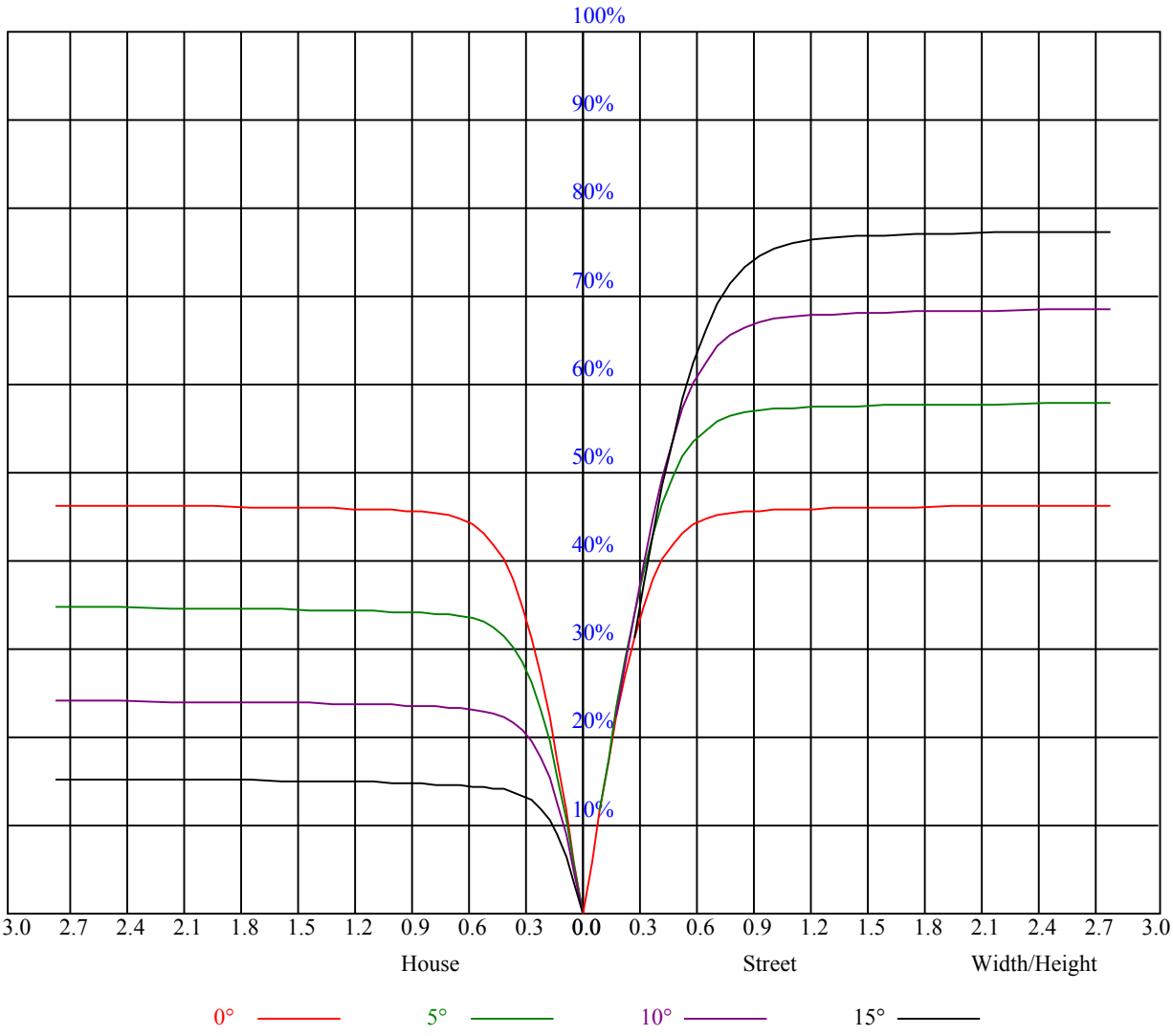
Budgetary Estimate Table



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	1.11	1.11	1.11	1.09	1.09	1.09	1.04	1.04	1.04	0.99	0.99	0.99	0.95	0.95	0.95	0.93
1	1.04	1.02	1.00	1.02	1.00	0.98	0.98	0.97	0.95	0.95	0.94	0.93	0.92	0.91	0.90	0.88
2	0.98	0.95	0.92	0.96	0.93	0.91	0.93	0.91	0.89	0.91	0.89	0.87	0.88	0.86	0.85	0.84
3	0.93	0.88	0.85	0.91	0.88	0.85	0.89	0.86	0.83	0.87	0.84	0.82	0.85	0.83	0.81	0.79
4	0.88	0.83	0.80	0.87	0.83	0.79	0.85	0.81	0.78	0.83	0.80	0.78	0.81	0.79	0.77	0.75
5	0.83	0.79	0.75	0.83	0.78	0.75	0.81	0.77	0.74	0.80	0.76	0.74	0.78	0.75	0.73	0.72
6	0.80	0.75	0.71	0.79	0.74	0.71	0.78	0.74	0.71	0.76	0.73	0.70	0.75	0.72	0.70	0.69
7	0.76	0.71	0.68	0.75	0.71	0.68	0.74	0.70	0.67	0.73	0.70	0.67	0.72	0.69	0.67	0.66
8	0.73	0.68	0.65	0.72	0.68	0.65	0.71	0.67	0.64	0.70	0.67	0.64	0.70	0.66	0.64	0.63
9	0.70	0.65	0.62	0.69	0.65	0.62	0.68	0.64	0.62	0.68	0.64	0.61	0.67	0.64	0.61	0.60
10	0.67	0.62	0.59	0.67	0.62	0.59	0.66	0.62	0.59	0.65	0.62	0.59	0.65	0.61	0.59	0.58

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	5599.02	5579.09	5550.31	5472.26	5373.73	5290.70	5186.08	5063.75	4919.83
45.0	5643.30	5612.30	5563.59	5522.63	5448.45	5342.18	5243.65	5146.22	5018.91
90.0	5597.91	5548.09	5490.52	5418.56	5309.52	5214.31	5083.12	4969.65	4856.17
135.0	5662.12	5625.59	5581.30	5529.82	5429.63	5344.39	5248.07	5123.53	5011.71
180.0	5599.02	5652.16	5629.46	5597.36	5557.50	5492.18	5417.46	5302.32	5205.45
225.0	5643.30	5637.21	5620.60	5588.50	5534.81	5467.28	5364.87	5259.15	5155.63
270.0	5597.91	5656.58	5659.35	5632.23	5607.87	5555.29	5506.02	5421.33	5308.96
315.0	5662.12	5647.17	5626.69	5606.77	5544.77	5464.51	5385.91	5284.61	5150.65
360.0	5599.02	5579.09	5550.31	5472.26	5373.73	5290.70	5186.08	5063.75	4919.83

C/γ(°)	9.0	10.0	11.0	12.0	13.0	14.0	15.0	16.0	17.0
0.0	4794.18	4654.13	4453.20	4277.73	4046.35	3847.08	3636.18	3414.21	3142.98
45.0	4902.11	4774.80	4637.52	4455.41	4286.58	4111.67	3947.27	3713.67	3499.45
90.0	4727.75	4571.65	4427.73	4276.07	4121.08	3906.30	3705.37	3497.79	3233.20
135.0	4879.42	4748.23	4621.47	4439.91	4291.01	4128.83	3955.01	3759.62	3501.12
180.0	5070.94	4964.66	4839.01	4702.84	4515.19	4360.76	4199.68	4023.10	3780.65
225.0	5049.36	4902.11	4764.28	4615.38	4408.91	4246.17	4007.05	3795.04	3580.27
270.0	5202.68	5089.21	4934.22	4794.73	4637.52	4420.54	4238.98	4050.78	3777.33
315.0	5031.09	4904.88	4715.57	4558.92	4384.56	4160.38	3962.21	3759.06	3543.18
360.0	4794.18	4654.13	4453.20	4277.73	4046.35	3847.08	3636.18	3414.21	3142.98

C/γ(°)	18.0	19.0	20.0	21.0	22.0	23.0	24.0	25.0	26.0
0.0	2923.22	2692.95	2461.57	2175.95	1960.62	1755.26	1523.33	1084.82	1084.82
45.0	3236.52	3023.97	2791.48	2499.22	2268.39	2049.19	1789.58	1590.31	1403.21
90.0	3007.36	2775.98	2489.25	2267.84	2054.17	1794.01	1597.50	1272.58	1070.15
135.0	3285.79	3058.84	2833.55	2546.82	2322.64	2053.07	1846.04	1599.17	1409.86
180.0	3574.18	3353.32	3058.29	2820.27	2583.91	2295.51	2082.96	1874.27	1625.18
225.0	3361.07	3068.80	2824.14	2572.28	2334.26	2053.07	1844.38	1653.41	1432.55
270.0	3571.41	3347.79	3101.46	2797.02	2547.37	2314.89	2035.91	1836.63	1648.98
315.0	3255.90	3020.65	2782.07	2546.27	2262.86	2048.08	1851.02	1614.66	1444.73
360.0	2923.22	2692.95	2461.57	2175.95	1960.62	1755.26	1523.33	1084.82	1084.82

C/γ(°)	27.0	28.0	29.0	30.0	31.0	32.0	33.0	34.0	35.0
0.0	1012.03	874.81	747.77	603.24	501.67	413.10	336.05	257.95	207.13
45.0	1228.30	1031.24	885.66	753.92	637.67	534.72	421.24	344.85	280.09
90.0	1030.24	885.10	751.98	611.16	512.24	424.67	349.17	271.68	220.58
135.0	1229.40	1069.99	887.87	760.00	643.76	540.80	427.33	353.71	290.61
180.0	1441.96	1273.69	1117.04	933.82	800.41	676.97	565.71	448.92	371.98
225.0	1070.87	1070.87	963.87	790.28	665.96	531.95	440.01	362.23	280.48
270.0	1471.30	1269.26	1119.25	941.01	805.95	683.06	541.91	443.94	369.21
315.0	1100.21	1100.21	956.90	784.75	663.75	552.71	456.94	375.13	290.16
360.0	1012.03	874.81	747.77	603.24	501.67	413.10	336.05	257.95	207.13

C/γ(°)	36.0	37.0	38.0	39.0	40.0	41.0	42.0	43.0	44.0
0.0	166.56	134.56	104.40	86.57	73.07	60.56	53.58	48.05	42.79
45.0	280.09	169.99	130.52	107.00	88.73	71.68	62.11	55.02	49.49
90.0	179.12	138.11	112.26	88.07	73.56	63.21	55.58	48.55	44.12
135.0	290.61	175.80	141.43	113.86	88.12	73.45	62.72	53.42	48.05
180.0	302.23	286.18	222.80	146.47	111.59	90.12	74.45	60.72	53.31
225.0	226.17	182.56	147.13	113.20	92.61	76.50	64.71	54.52	48.71
270.0	300.57	284.52	213.55	140.87	115.14	89.17	74.51	63.71	55.35
315.0	233.15	187.65	150.06	114.42	93.77	78.05	63.49	55.35	47.94
360.0	166.56	134.56	104.40	86.57	73.07	60.56	53.58	48.05	42.79

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	39.47	35.98	33.60	31.61	29.84	27.90	26.57	25.46	24.47
45.0	44.12	40.68	37.75	35.09	32.38	30.56	28.89	27.12	25.91
90.0	40.63	37.59	34.43	32.33	30.56	28.95	27.23	26.13	24.91
135.0	42.84	39.58	36.70	34.15	31.99	29.78	28.23	26.90	25.74
180.0	47.88	43.56	39.30	36.48	33.99	31.88	29.72	28.17	26.79
225.0	44.28	39.91	37.03	34.54	31.94	30.17	28.62	26.85	25.74
270.0	47.99	43.73	39.52	36.64	34.32	31.83	30.11	28.56	27.23
315.0	43.56	40.13	36.59	34.15	32.05	30.28	28.34	26.90	25.74
360.0	39.47	35.98	33.60	31.61	29.84	27.90	26.57	25.46	24.47

C/γ(°)	54.0	55.0	56.0	57.0	58.0	59.0	60.0	61.0	62.0
0.0	23.30	22.58	21.92	21.31	20.65	20.15	19.60	19.21	18.82
45.0	25.02	23.80	23.03	22.36	21.64	21.09	20.59	19.98	19.54
90.0	24.02	23.25	22.42	21.81	21.20	20.70	20.09	19.65	19.21
135.0	24.63	23.75	22.81	22.20	21.59	20.87	20.37	19.87	19.32
180.0	25.41	24.41	23.58	22.64	22.03	21.31	20.70	20.26	19.82
225.0	24.74	23.58	22.86	22.14	21.53	20.92	20.37	19.93	19.48
270.0	25.79	24.74	23.91	23.08	22.25	21.64	21.09	20.48	20.04
315.0	24.69	23.58	22.75	22.09	21.31	20.76	20.15	19.71	19.26
360.0	23.30	22.58	21.92	21.31	20.65	20.15	19.60	19.21	18.82

C/γ(°)	63.0	64.0	65.0	66.0	67.0	68.0	69.0	70.0	71.0
0.0	18.38	17.99	17.66	17.27	16.94	16.55	16.27	15.89	15.55
45.0	19.15	18.82	18.43	17.93	17.55	17.16	16.83	16.44	16.05
90.0	18.82	18.38	17.99	17.60	17.16	16.88	16.50	16.11	15.78
135.0	18.93	18.54	18.21	17.71	17.38	17.10	16.72	16.27	15.94
180.0	19.26	18.82	18.49	18.16	17.66	17.27	16.94	16.61	16.22
225.0	18.93	18.54	18.16	17.77	17.38	17.05	16.66	16.33	16.00
270.0	19.54	19.04	18.65	18.21	17.82	17.44	17.10	16.72	16.38
315.0	18.76	18.38	18.05	17.66	17.33	16.94	16.61	16.27	15.94
360.0	18.38	17.99	17.66	17.27	16.94	16.55	16.27	15.89	15.55

C/γ(°)	72.0	73.0	74.0	75.0	76.0	77.0	78.0	79.0	80.0
0.0	15.28	15.00	14.67	14.39	14.12	13.78	13.51	13.12	12.84
45.0	15.78	15.44	15.06	14.83	14.56	14.28	13.89	13.62	13.34
90.0	15.39	15.11	14.89	14.61	14.23	13.89	13.62	13.40	13.01
135.0	15.67	15.28	15.00	14.72	14.45	14.17	13.84	13.51	13.28
180.0	15.94	15.55	15.28	15.00	14.67	14.45	14.12	13.84	13.51
225.0	15.61	15.33	15.06	14.72	14.45	14.17	13.84	13.51	13.23
270.0	16.05	15.72	15.39	15.11	14.83	14.50	14.17	13.84	13.51
315.0	15.55	15.28	15.00	14.67	14.45	14.06	13.73	13.45	13.12
360.0	15.28	15.00	14.67	14.39	14.12	13.78	13.51	13.12	12.84

C/γ(°)	81.0	82.0	83.0	84.0	85.0	86.0	87.0	88.0	89.0
0.0	12.57	12.29	12.12	11.90	11.68	11.46	11.29	11.07	11.02
45.0	13.06	12.73	12.40	12.12	11.85	11.62	11.40	11.18	11.02
90.0	12.73	12.45	12.07	11.85	11.62	11.46	11.24	11.07	10.96
135.0	12.95	12.62	12.34	12.01	11.73	11.57	11.40	11.24	10.96
180.0	13.23	12.90	12.62	12.29	12.07	11.85	11.62	11.46	11.24
225.0	12.95	12.62	12.34	12.07	11.85	11.57	11.40	11.18	11.07
270.0	13.23	12.90	12.57	12.34	12.01	11.73	11.57	11.35	11.18
315.0	12.84	12.57	12.34	12.01	11.79	11.57	11.40	11.18	11.02
360.0	12.57	12.29	12.12	11.90	11.68	11.46	11.29	11.07	11.02

Intensity data(cd)

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