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NATA

Client:
LumCAT: 2-2639-L
Luminaire: 92.70.411.00
Report No: 20231016-B016
Ballast type: AC

Test No: 20231016-C016	Voltage(V): 34.420
LampCAT: NICHIA NFCWJ108B-V3	Current(A): 0.576
Lamp flux(lm): 2574.8	Power (W): 19.825
Number of Lamps: 1	PF: 0.000
Length(mm): 0	Width(mm): 0
Phm Type: C	Height(mm): 0

Photometric Results

Lumens(lm): 2436.94, Efficiency(%): 94.65% , Luminous Efficacy(lm/W): 122.92
Central intensity(cd): 9719.262, Maximum intensity(cd): 9719.262
Angle of maximum intensity: C=0.0 γ=0.0
Beam Angle(50%Imax): [C0/180]Total=21.2
[C90/270]Total=21.2
Field angle(10%Imax): [C0/180]Total=55.8
[C90/270]Total=55.8
Beam angle of C0 plane : 21.26
Aveage BeamAngle(IEC 61341):21.26
Maximum s/h(1/2): C0_180=0.36 C90_270=0.36
Maximum s/h(1/4): C0_180=0.40 C90_270=0.40
Up flux rate of lamp(%): 0.00%
Down flux rate of lamp(%): 94.65%
Up flux rate of LUM(%): - -
Down flux rate of LUM(%): 100.00%
CIE Type : Direct lighting
Output flux ratio in π solid angle : 97.866%

Zonal flux distribution table

γ(°)	Average I(cd)	Zonal F(lm)	Sum F(lm)	Eff Flux(%)	Eff Sum(%)
0.0	9719.262	0.000	0	0.00%	0.00%
1.0	9659.272	9.272	9.272	0.36%	0.38%
2.0	9485.808	27.479	36.751	1.07%	1.51%
3.0	9195.755	44.680	81.431	1.74%	3.34%
4.0	8763.098	60.114	141.545	2.33%	5.81%
5.0	8241.252	73.152	214.697	2.84%	8.81%
6.0	7649.452	83.510	298.207	3.24%	12.24%
7.0	7038.349	91.167	389.374	3.54%	15.98%
8.0	6408.494	96.236	485.61	3.74%	19.93%
9.0	5777.463	98.761	584.371	3.84%	23.98%
10.0	5215.070	99.478	683.849	3.86%	28.06%
11.0	4650.048	98.573	782.422	3.83%	32.11%
12.0	4167.642	96.390	878.812	3.74%	36.06%
13.0	3716.302	93.563	972.375	3.63%	39.90%
14.0	3325.644	90.136	1062.511	3.50%	43.60%
15.0	2988.264	86.680	1149.191	3.37%	47.16%
16.0	2681.951	83.085	1232.276	3.23%	50.57%
17.0	2406.152	79.235	1311.511	3.08%	53.82%
18.0	2183.976	75.681	1387.192	2.94%	56.92%
19.0	1992.176	72.657	1459.849	2.82%	59.91%
20.0	1824.593	69.857	1529.706	2.71%	62.77%
21.0	1673.824	67.177	1596.883	2.61%	65.53%
22.0	1541.252	64.608	1661.491	2.51%	68.18%
23.0	1430.545	62.356	1723.848	2.42%	70.74%
24.0	1303.238	59.770	1783.618	2.32%	73.19%
25.0	1195.319	56.812	1840.43	2.21%	75.52%
26.0	1137.627	55.069	1895.499	2.14%	77.78%
27.0	1059.994	53.765	1949.264	2.09%	79.99%
28.0	962.724	51.211	2000.475	1.99%	82.09%
29.0	868.920	47.921	2048.396	1.86%	84.06%
30.0	761.541	44.022	2092.418	1.71%	85.86%
31.0	671.045	39.867	2132.285	1.55%	87.50%
32.0	577.193	35.761	2168.046	1.39%	88.97%
33.0	487.375	31.363	2199.408	1.22%	90.25%
34.0	400.732	26.877	2226.285	1.04%	91.36%
35.0	321.535	22.431	2248.716	0.87%	92.28%
36.0	263.926	18.641	2267.357	0.72%	93.04%
37.0	213.762	15.579	2282.937	0.61%	93.68%

Zonal flux distribution table

γ(°)	Average I(cd)	Zonal F(lm)	Sum F(lm)	Eff Flux(%)	Eff Sum(%)
38.0	165.653	12.664	2295.601	0.49%	94.20%
39.0	107.856	9.336	2304.937	0.36%	94.58%
40.0	86.704	6.786	2311.722	0.26%	94.86%
41.0	75.433	5.774	2317.496	0.22%	95.10%
42.0	67.386	5.189	2322.685	0.20%	95.31%
43.0	60.861	4.751	2327.435	0.18%	95.51%
44.0	55.499	4.392	2331.827	0.17%	95.69%
45.0	51.043	4.095	2335.922	0.16%	95.85%
46.0	47.397	3.850	2339.771	0.15%	96.01%
47.0	44.359	3.649	2343.421	0.14%	96.16%
48.0	42.103	3.495	2346.916	0.14%	96.31%
49.0	40.166	3.378	2350.294	0.13%	96.44%
50.0	38.436	3.277	2353.572	0.13%	96.58%
51.0	37.004	3.192	2356.763	0.12%	96.71%
52.0	35.911	3.129	2359.892	0.12%	96.84%
53.0	35.087	3.088	2362.981	0.12%	96.97%
54.0	34.499	3.067	2366.048	0.12%	97.09%
55.0	34.229	3.068	2369.116	0.12%	97.22%
56.0	34.250	3.094	2372.21	0.12%	97.34%
57.0	34.361	3.137	2375.347	0.12%	97.47%
58.0	34.409	3.180	2378.527	0.12%	97.60%
59.0	34.181	3.207	2381.734	0.12%	97.73%
60.0	33.489	3.197	2384.931	0.12%	97.87%
61.0	32.112	3.131	2388.061	0.12%	97.99%
62.0	29.960	2.991	2391.052	0.12%	98.12%
63.0	27.269	2.783	2393.836	0.11%	98.23%
64.0	24.632	2.547	2396.382	0.10%	98.34%
65.0	22.404	2.328	2398.71	0.09%	98.43%
66.0	20.771	2.154	2400.864	0.08%	98.52%
67.0	19.561	2.028	2402.893	0.08%	98.60%
68.0	18.703	1.938	2404.831	0.08%	98.68%
69.0	18.018	1.873	2406.704	0.07%	98.76%
70.0	17.443	1.821	2408.525	0.07%	98.83%
71.0	16.890	1.775	2410.3	0.07%	98.91%
72.0	16.371	1.729	2412.029	0.07%	98.98%
73.0	15.928	1.689	2413.718	0.07%	99.05%
74.0	15.485	1.651	2415.37	0.06%	99.11%
75.0	15.049	1.613	2416.983	0.06%	99.18%

Zonal flux distribution table

γ(°)	Average I(cd)	Zonal F(lm)	Sum F(lm)	Eff Flux(%)	Eff Sum(%)
76.0	14.648	1.576	2418.559	0.06%	99.25%
77.0	14.247	1.541	2420.1	0.06%	99.31%
78.0	13.873	1.505	2421.605	0.06%	99.37%
79.0	13.486	1.470	2423.075	0.06%	99.43%
80.0	13.091	1.433	2424.508	0.06%	99.49%
81.0	12.711	1.395	2425.903	0.05%	99.55%
82.0	12.316	1.357	2427.261	0.05%	99.60%
83.0	11.949	1.319	2428.58	0.05%	99.66%
84.0	11.624	1.284	2429.864	0.05%	99.71%
85.0	11.313	1.252	2431.116	0.05%	99.76%
86.0	11.029	1.221	2432.337	0.05%	99.81%
87.0	10.773	1.193	2433.53	0.05%	99.86%
88.0	10.462	1.163	2434.693	0.05%	99.91%
89.0	10.199	1.132	2435.826	0.04%	99.95%
90.0	10.061	1.111	2436.937	0.04%	100.00%

Zonal flux distribution table

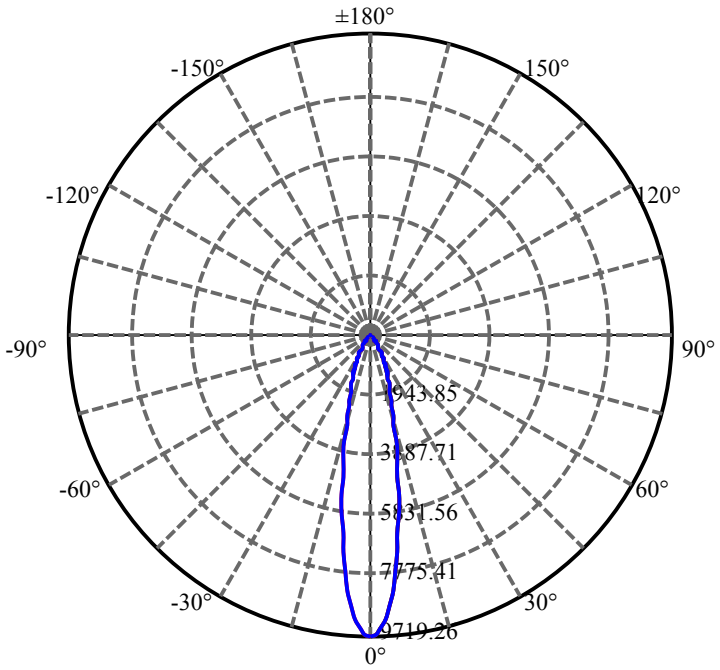
ZONAL LUMEN SUMMARY

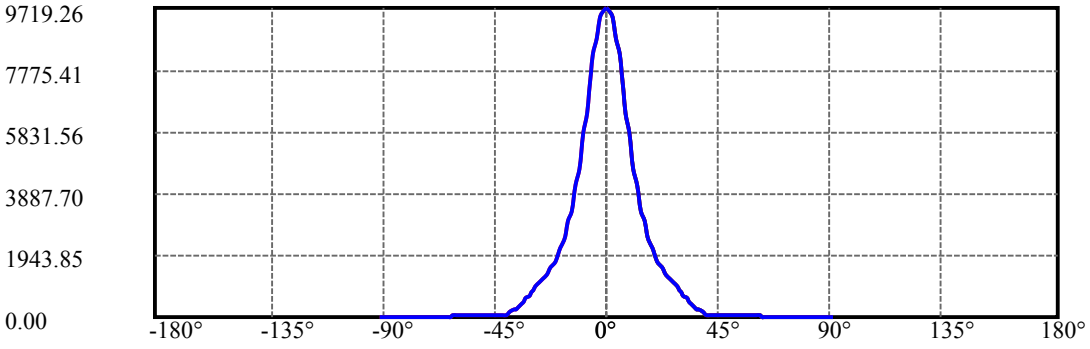
Zone	Lumens	%Lamp	%Fixt
0-30	2092.42	81.27%	85.86%
0-40	2311.72	89.78%	94.86%
0-60	2384.93	92.63%	97.87%
0-90	2435.83	94.60%	99.95%
0-120	2435.83	94.60%	99.95%
0-180	2436.94	94.65%	100.00%
60-90	50.90	1.98%	2.09%
90-120	0.00	0.00%	0.00%
90-130	0.00	0.00%	0.00%
90-150	0.00	0.00%	0.00%
90-180	0.00	0.00%	0.00%
0-27.01	1949.55	75.72%	80.00%

ZONAL LUMEN SUMMARY

0-10	683.85
10-20	845.86
20-30	562.71
30-40	219.30
40-50	41.85
50-60	31.36
60-70	23.59
70-80	15.98
80-90	11.32
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):

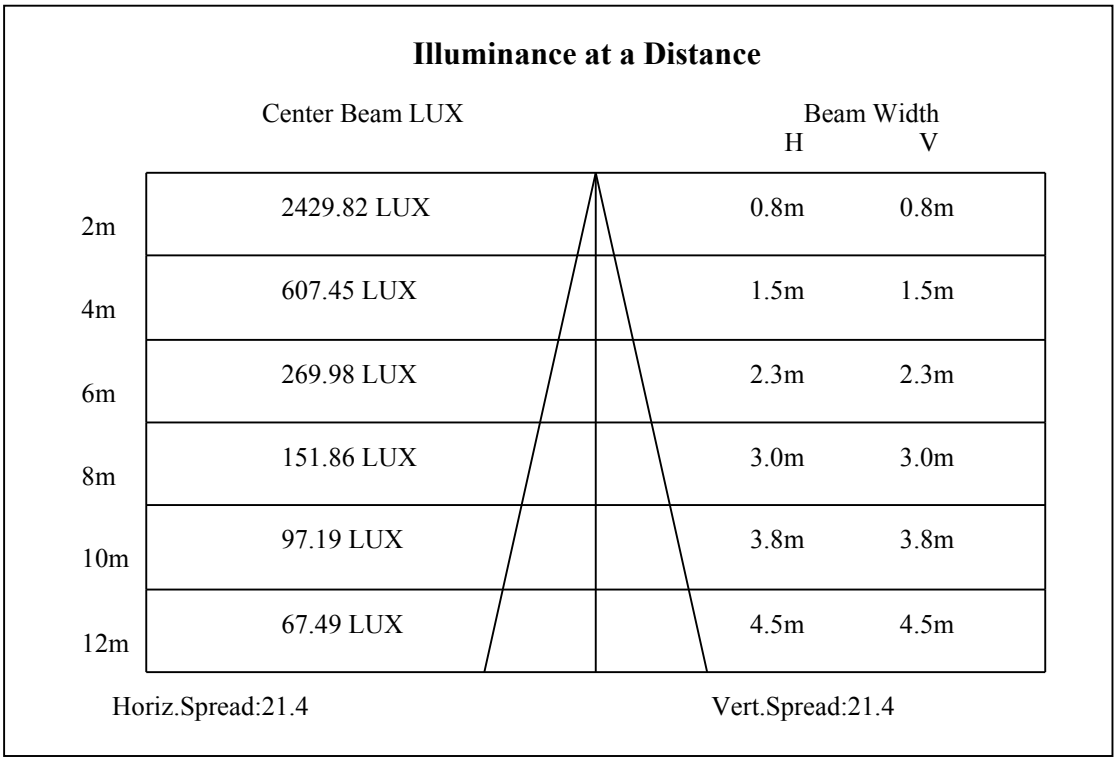
C0/C180:

C90/C270:

Field angle(10%Imax):C0/180Left:27.9 Right:27.9
:C90/270Left:27.9 Right:27.9

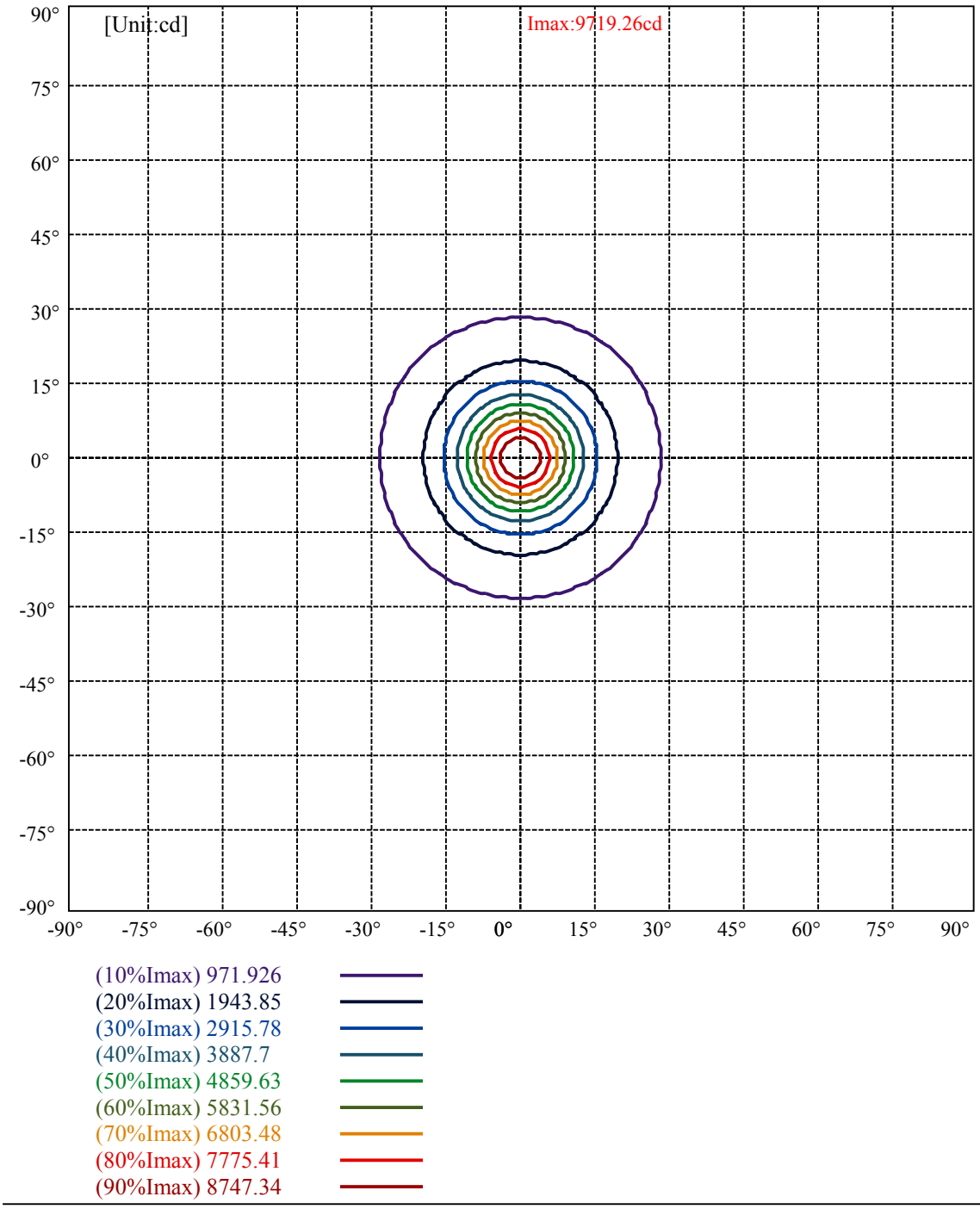
Beam Angle(50%Imax):C0/180Left:10.6 Right:10.6
:C90/270Left:10.6 Right:10.6

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)

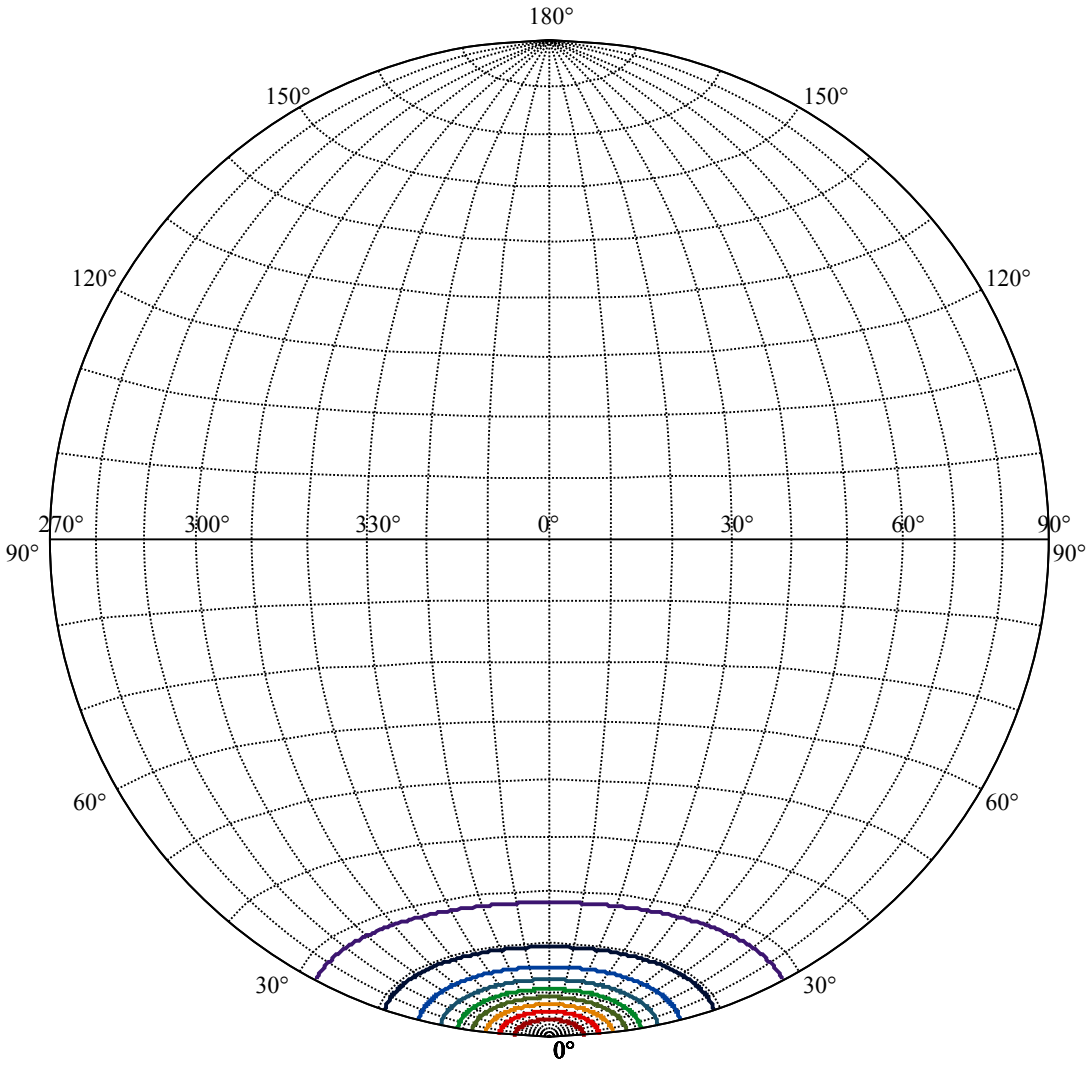


Equipment: GMS1980
Temperature(°C): 0.0

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

Operator: NT07
Distance(m): 7.44

ISO candela diagram on circular web



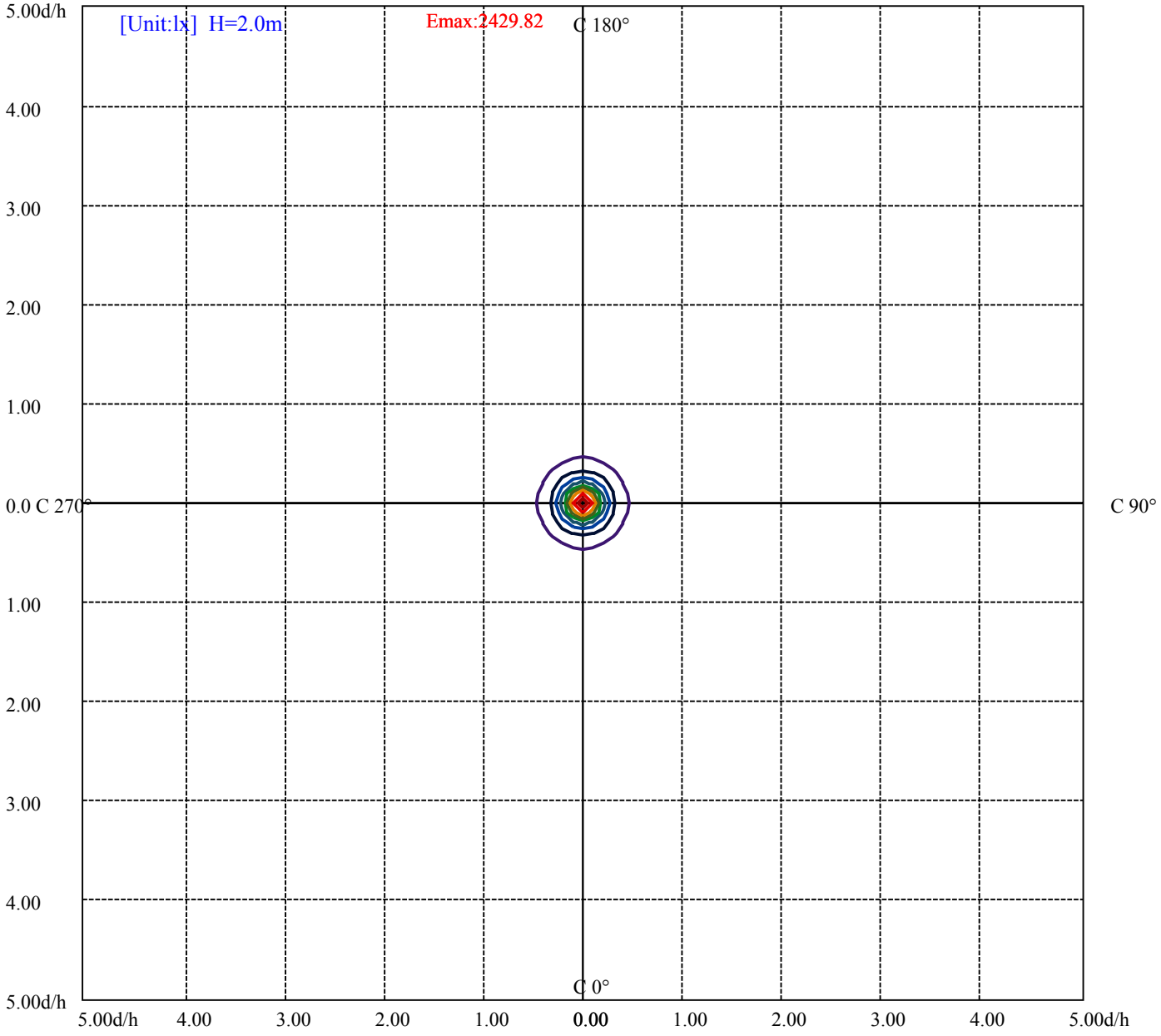
House [Unit:cd] Road

Imax:9719.26

(10%Imax) 971.926
(20%Imax) 1943.85
(30%Imax) 2915.78
(40%Imax) 3887.7
(50%Imax) 4859.63
(60%Imax) 5831.56
(70%Imax) 6803.48
(80%Imax) 7775.41
(90%Imax) 8747.34

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

ISO illuminance diagram

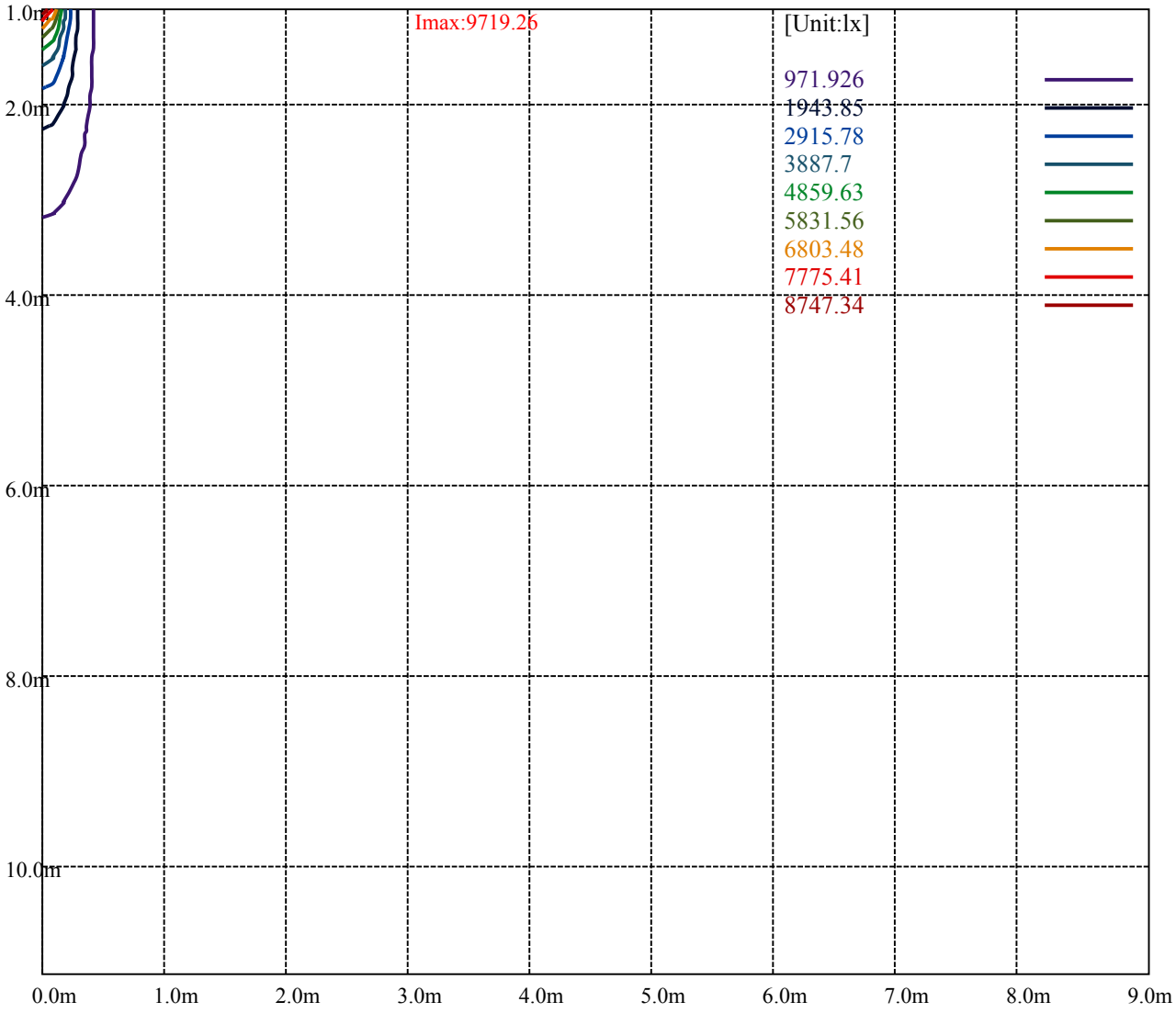


Equipment: GMS1980
Temperature(°C): 0.0

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

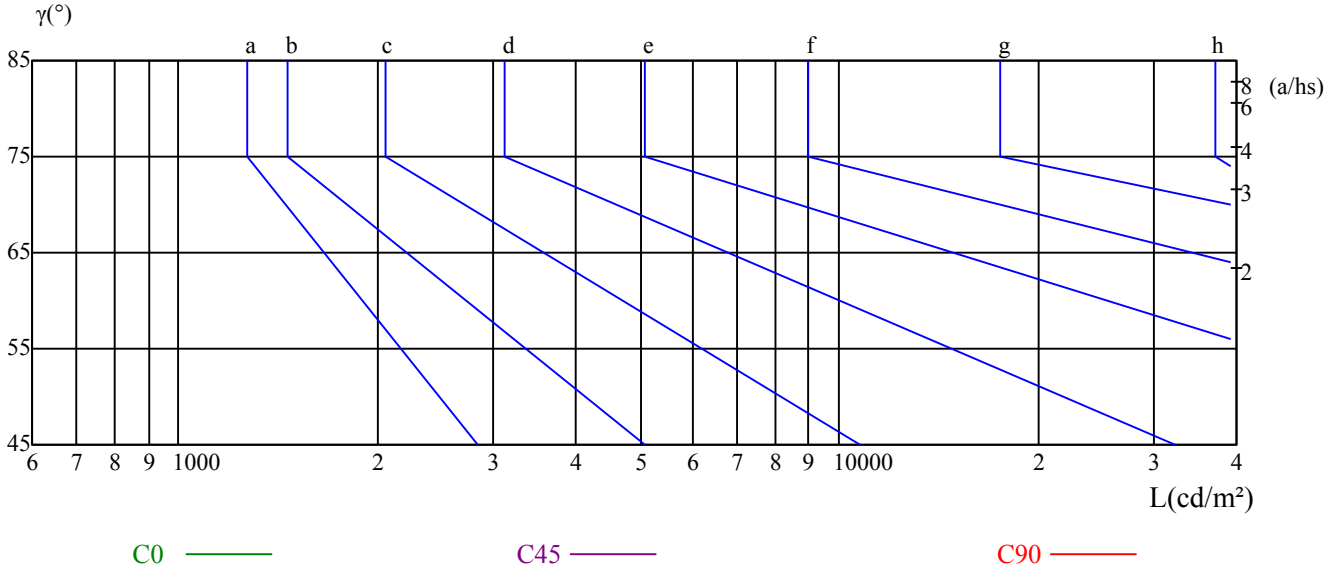
γ	45	50	55	60	65	70	75	80	85
C0	0	0	0	0	0	0	0	0	0
C45	0	0	0	0	0	0	0	0	0
C90	0	0	0	0	0	0	0	0	0

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

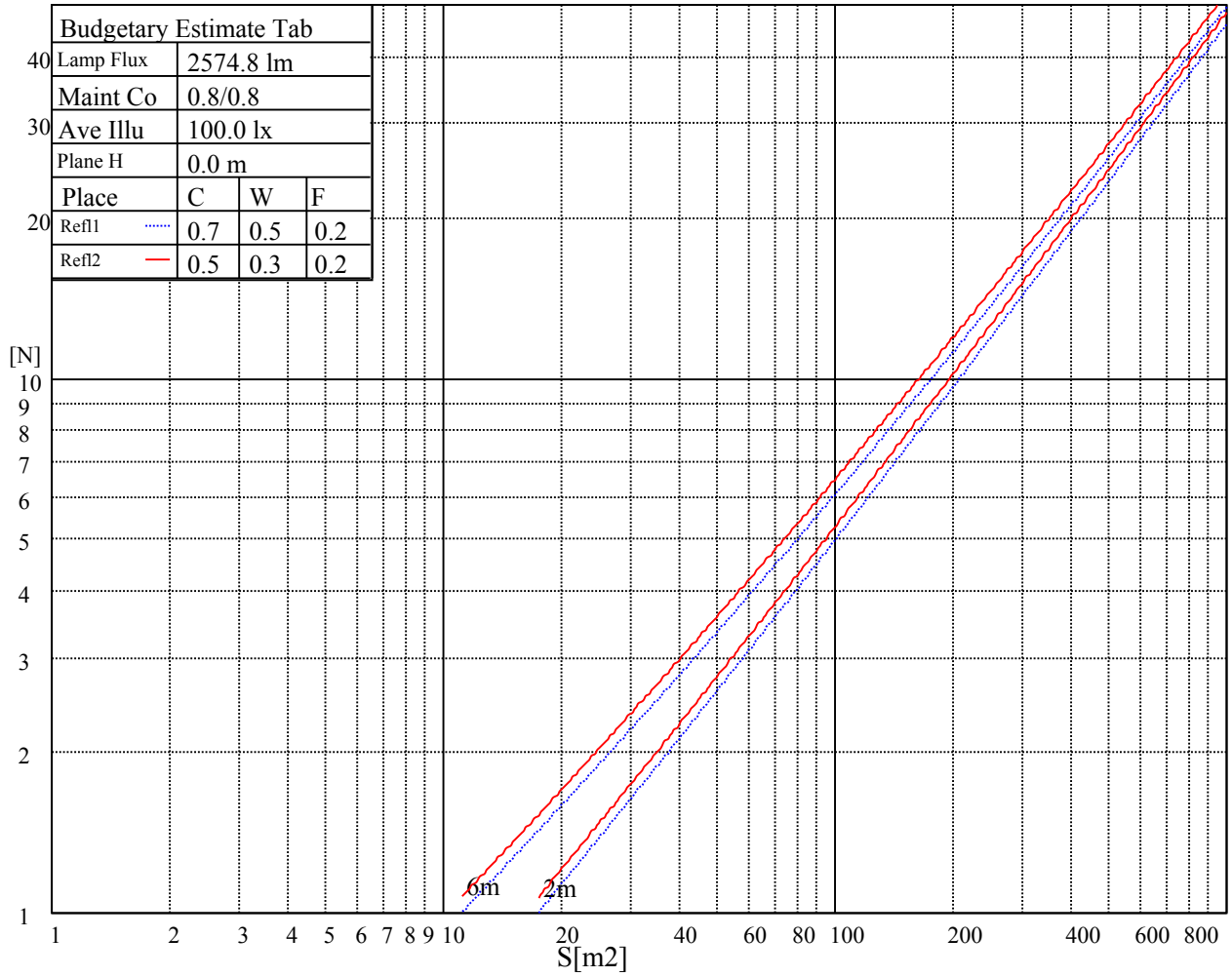
Luminance Limitting Curve



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

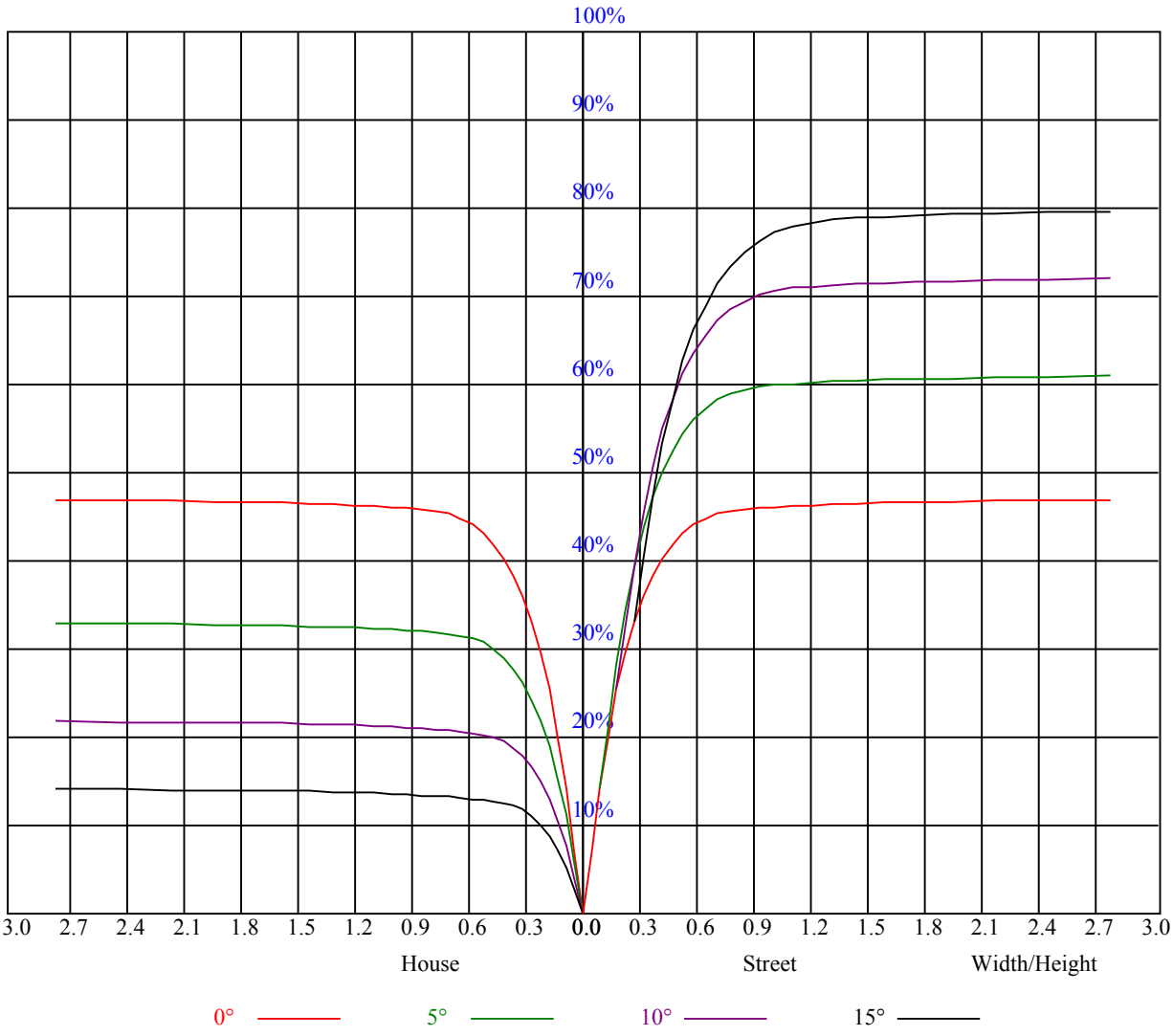
Budgetary Estimate Table



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	1.03	1.02	1.04	1.02	1.00	1.00	0.98	0.97	0.96	0.95	0.94	0.93	0.92	0.91	0.90
2	1.00	0.96	0.93	0.98	0.95	0.92	0.95	0.93	0.90	0.92	0.90	0.88	0.90	0.88	0.87	0.85
3	0.94	0.90	0.87	0.93	0.89	0.86	0.91	0.88	0.85	0.88	0.86	0.84	0.86	0.84	0.82	0.81
4	0.90	0.85	0.82	0.89	0.85	0.81	0.87	0.83	0.81	0.85	0.82	0.80	0.83	0.81	0.79	0.77
5	0.86	0.81	0.78	0.85	0.81	0.77	0.83	0.79	0.77	0.82	0.79	0.76	0.80	0.78	0.75	0.74
6	0.82	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	0.72	0.71
7	0.79	0.74	0.71	0.78	0.74	0.71	0.77	0.73	0.70	0.76	0.72	0.70	0.75	0.72	0.69	0.68
8	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
9	0.73	0.68	0.65	0.72	0.68	0.65	0.72	0.68	0.65	0.71	0.67	0.65	0.70	0.67	0.64	0.63
10	0.70	0.66	0.63	0.70	0.66	0.63	0.69	0.65	0.63	0.68	0.65	0.62	0.68	0.65	0.62	0.61

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	9644.81	9442.77	9161.02	8741.99	8108.20	7544.70	6791.33	6198.50	5607.32
45.0	9765.48	9704.04	9565.10	9303.83	8812.85	8301.93	7736.22	7014.96	6399.43
90.0	9716.22	9572.30	9229.66	8827.24	8321.86	7767.77	7052.05	6439.84	5842.02
135.0	9750.54	9728.95	9594.44	9347.01	8863.22	8375.00	7849.14	7276.23	6536.71
180.0	9644.81	9745.55	9726.18	9601.08	9372.47	8915.80	8474.64	7941.03	7369.22
225.0	9765.48	9666.40	9484.84	9194.23	8813.40	8213.37	7674.78	7097.44	6350.16
270.0	9716.22	9762.16	9663.08	9475.43	9167.66	8665.05	8166.32	7482.15	6902.04
315.0	9750.54	9652.01	9462.14	9075.22	8645.13	8146.39	7451.15	6856.65	6261.05
360.0	9644.81	9442.77	9161.02	8741.99	8108.20	7544.70	6791.33	6198.50	5607.32

C/γ(°)	9.0	10.0	11.0	12.0	13.0	14.0	15.0	16.0	17.0
0.0	4935.33	4459.29	4026.42	3638.39	3203.87	2890.56	2610.48	2360.83	2101.22
45.0	5802.16	5111.35	4617.04	4057.42	3667.18	3304.61	2980.24	2616.56	2374.67
90.0	5277.97	4763.18	4189.16	3768.47	3315.68	2985.77	2622.65	2368.58	2165.43
135.0	5954.94	5388.12	4871.67	4287.69	3865.34	3394.84	3057.73	2753.29	2430.02
180.0	6624.17	6029.67	5324.46	4797.50	4323.67	3792.28	3411.44	3082.09	2730.59
225.0	5767.29	5215.97	4581.06	4141.00	3653.89	3294.09	2971.38	2688.52	2439.43
270.0	6324.70	5755.11	5076.48	4574.98	4115.54	3705.92	3333.95	2944.81	2664.72
315.0	5533.15	4997.88	4514.09	4075.69	3585.25	3237.08	2918.24	2640.92	2343.12
360.0	4935.33	4459.29	4026.42	3638.39	3203.87	2890.56	2610.48	2360.83	2101.22

C/γ(°)	18.0	19.0	20.0	21.0	22.0	23.0	24.0	25.0	26.0
0.0	1927.97	1775.19	1610.24	1494.55	1392.14	1278.67	1091.85	1091.85	1004.00
45.0	2162.67	1982.77	1820.03	1648.98	1534.96	1401.55	1308.01	1224.42	1118.70
90.0	1981.11	1789.03	1662.82	1546.58	1418.16	1329.59	1100.76	1100.76	1078.56
135.0	2214.14	2028.16	1867.08	1693.82	1574.26	1465.21	1370.00	1262.62	1182.35
180.0	2463.24	2250.12	2050.85	1872.61	1697.14	1574.81	1463.00	1348.97	1265.38
225.0	2167.09	1980.00	1820.03	1688.28	1537.72	1432.00	1342.88	1097.77	1097.77
270.0	2414.52	2169.86	1989.96	1795.12	1663.93	1549.90	1423.69	1338.45	1256.53
315.0	2141.08	1962.29	1775.74	1650.64	1511.71	1412.62	1325.72	1097.72	1097.72
360.0	1927.97	1775.19	1610.24	1494.55	1392.14	1278.67	1091.85	1091.85	1004.00

C/γ(°)	27.0	28.0	29.0	30.0	31.0	32.0	33.0	34.0	35.0
0.0	911.23	817.57	726.85	615.53	529.35	445.87	348.78	280.09	217.87
45.0	1031.24	936.03	820.34	732.88	641.55	555.75	452.24	376.40	306.66
90.0	961.38	865.56	772.35	662.97	574.52	468.68	392.68	320.72	238.41
135.0	1097.66	985.29	891.19	777.72	688.60	599.48	514.79	414.60	341.53
180.0	1186.23	1087.14	1004.11	889.53	797.09	704.10	611.66	502.61	419.03
225.0	1057.36	972.84	881.40	767.48	676.86	587.14	499.84	418.86	327.91
270.0	1181.25	1074.41	982.53	887.87	794.32	681.40	591.18	505.38	406.30
315.0	1053.60	962.93	872.59	758.34	666.07	575.12	487.83	387.20	314.57
360.0	911.23	817.57	726.85	615.53	529.35	445.87	348.78	280.09	217.87

C/γ(°)	36.0	37.0	38.0	39.0	40.0	41.0	42.0	43.0	44.0
0.0	165.23	117.74	94.77	80.26	72.18	65.82	58.73	54.03	50.21
45.0	290.05	213.89	125.27	96.70	79.10	71.24	64.82	58.18	53.53
90.0	180.95	135.01	101.68	79.82	71.57	64.65	59.12	52.97	48.99
135.0	290.61	290.61	144.69	110.65	90.34	77.66	69.75	63.66	56.63
180.0	342.09	291.16	291.16	148.40	113.86	92.72	79.21	71.07	64.43
225.0	261.16	203.42	153.55	108.55	87.85	75.89	67.86	62.05	55.80
270.0	333.23	281.75	281.75	136.94	96.70	82.03	73.40	66.04	60.34
315.0	248.09	176.52	132.35	101.52	82.03	73.45	66.20	58.90	54.08
360.0	165.23	117.74	94.77	80.26	72.18	65.82	58.73	54.03	50.21

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	46.94	43.78	41.74	39.97	38.42	36.87	35.87	35.09	34.43
45.0	49.87	45.94	43.62	41.57	39.80	37.92	36.64	35.59	34.82
90.0	45.78	42.68	40.63	38.53	37.14	35.92	34.98	34.15	33.71
135.0	52.31	48.60	44.95	42.51	40.46	38.25	36.87	35.76	34.93
180.0	57.51	52.92	48.32	45.45	43.07	41.07	38.91	37.47	36.37
225.0	51.59	48.21	44.89	42.68	40.85	39.19	37.53	36.48	35.65
270.0	54.30	50.32	47.22	44.62	41.96	40.19	38.64	37.14	36.15
315.0	50.04	46.72	43.51	41.52	39.63	38.08	36.59	35.59	34.65
360.0	46.94	43.78	41.74	39.97	38.42	36.87	35.87	35.09	34.43

C/γ(°)	54.0	55.0	56.0	57.0	58.0	59.0	60.0	61.0	62.0
0.0	34.26	34.10	34.15	34.10	33.82	32.82	31.39	29.34	26.79
45.0	34.15	33.93	34.21	34.43	34.76	34.60	34.04	32.77	30.22
90.0	33.60	33.77	34.21	34.60	34.82	34.43	33.05	30.94	27.84
135.0	34.21	33.88	33.88	33.93	34.04	34.04	33.71	32.55	30.39
180.0	35.37	34.65	34.32	34.21	34.43	34.37	34.37	33.71	32.49
225.0	35.04	34.71	34.54	34.71	34.65	34.65	33.71	32.38	30.33
270.0	35.32	34.82	34.65	34.82	34.71	34.71	34.43	33.38	31.83
315.0	34.04	33.99	34.04	34.10	34.04	33.82	33.21	31.83	29.78
360.0	34.26	34.10	34.15	34.10	33.82	32.82	31.39	29.34	26.79

C/γ(°)	63.0	64.0	65.0	66.0	67.0	68.0	69.0	70.0	71.0
0.0	23.86	21.86	20.48	19.43	18.60	17.99	17.44	16.83	16.33
45.0	27.23	24.58	22.25	20.87	19.48	18.71	18.10	17.49	16.94
90.0	25.13	22.58	20.59	19.37	18.65	17.99	17.27	16.77	16.33
135.0	28.01	24.80	22.42	21.03	19.54	18.76	18.16	17.60	16.88
180.0	30.61	27.40	24.80	22.47	20.98	19.54	18.82	18.21	17.66
225.0	26.90	24.52	22.20	20.76	19.60	18.71	18.10	17.55	17.05
270.0	29.84	27.18	24.69	21.81	20.43	19.43	18.49	17.88	17.21
315.0	26.57	24.13	21.81	20.43	19.21	18.49	17.77	17.21	16.72
360.0	23.86	21.86	20.48	19.43	18.60	17.99	17.44	16.83	16.33

C/γ(°)	72.0	73.0	74.0	75.0	76.0	77.0	78.0	79.0	80.0
0.0	15.83	15.39	15.06	14.56	14.23	13.84	13.51	13.06	12.68
45.0	16.38	15.94	15.55	15.06	14.72	14.34	13.95	13.51	13.17
90.0	15.83	15.39	15.00	14.67	14.17	13.84	13.51	13.06	12.73
135.0	16.44	16.05	15.61	15.11	14.78	14.39	14.00	13.67	13.23
180.0	16.99	16.55	16.11	15.61	15.22	14.67	14.34	13.95	13.51
225.0	16.50	16.05	15.50	15.11	14.67	14.23	13.89	13.51	13.06
270.0	16.77	16.33	15.72	15.33	14.95	14.56	14.06	13.73	13.40
315.0	16.22	15.72	15.33	14.95	14.45	14.12	13.73	13.40	12.95
360.0	15.83	15.39	15.06	14.56	14.23	13.84	13.51	13.06	12.68

C/γ(°)	81.0	82.0	83.0	84.0	85.0	86.0	87.0	88.0	89.0
0.0	12.29	11.90	11.57	11.29	11.02	10.79	10.46	10.13	10.07
45.0	12.73	12.29	11.90	11.62	11.29	11.02	10.79	10.41	10.07
90.0	12.29	11.96	11.62	11.35	11.02	10.85	10.57	10.19	10.02
135.0	12.84	12.51	12.07	11.73	11.40	11.07	10.85	10.57	10.24
180.0	13.17	12.73	12.45	12.01	11.68	11.35	11.07	10.79	10.52
225.0	12.73	12.29	12.01	11.62	11.35	11.02	10.79	10.52	10.19
270.0	13.06	12.62	12.12	11.85	11.51	11.18	10.90	10.63	10.41
315.0	12.57	12.23	11.85	11.51	11.24	10.96	10.74	10.46	10.07
360.0	12.29	11.90	11.57	11.29	11.02	10.79	10.46	10.13	10.07

Intensity data(cd)

C/γ(°)	90.0
0.0	10.07
45.0	10.07
90.0	10.02
135.0	10.07
180.0	10.13
225.0	10.02
270.0	10.07
315.0	10.02
360.0	10.07