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NATA

Client:
LumCAT: 2-2640-L
Luminaire: 92.70.411.00
Report No: 20231019-B014
Ballast type: AC

Test No: 20231019-C014	Voltage(V): 34.250
LampCAT: NICHIA NFCWJ120B-V3	Current(A): 0.577
Lamp flux(lm): 2611.4	Power (W): 19.762
Number of Lamps: 1	PF: 0.000
Length(mm): 0	Width(mm): 0
Phm Type: C	Height(mm): 0

Photometric Results

Lumens(lm): 2418.95, Efficiency(%): 92.63% , Luminous Efficacy(lm/W): 122.40
Central intensity(cd): 6926.396, Maximum intensity(cd): 6926.396
Angle of maximum intensity: C=0.0 γ=0.0
Beam Angle(50%Imax): [C0/180]Total=27.2
[C90/270]Total=27.2
Field angle(10%Imax): [C0/180]Total=63.4
[C90/270]Total=63.4
Maximum s/h(1/2): C0_180=0.45 C90_270=0.45
Maximum s/h(1/4): C0_180=0.51 C90_270=0.51
Up flux rate of lamp(%): 0.00%
Down flux rate of lamp(%): 92.63%
Up flux rate of LUM(%): - -
Down flux rate of LUM(%): 100.00%
CIE Type : Direct lighting
Output flux ratio in π solid angle : 97.984%

Zonal flux distribution table

γ(°)	Average I(cd)	Zonal F(lm)	Sum F(lm)	Eff Flux(%)	Eff Sum(%)
0.0	6926.396	0.000	0	0.00%	0.00%
1.0	6895.951	6.614	6.614	0.25%	0.27%
2.0	6791.887	19.646	26.26	0.75%	1.09%
3.0	6634.821	32.112	58.372	1.23%	2.41%
4.0	6429.251	43.730	102.102	1.67%	4.22%
5.0	6179.538	54.242	156.344	2.08%	6.46%
6.0	5891.906	63.439	219.783	2.43%	9.09%
7.0	5576.944	71.187	290.97	2.73%	12.03%
8.0	5243.577	77.440	368.41	2.97%	15.23%
9.0	4891.667	82.141	450.551	3.15%	18.63%
10.0	4563.282	85.564	536.115	3.28%	22.16%
11.0	4242.231	87.985	624.1	3.37%	25.80%
12.0	3921.941	89.246	713.346	3.42%	29.49%
13.0	3633.618	89.665	803.011	3.43%	33.20%
14.0	3356.158	89.469	892.48	3.43%	36.90%
15.0	3089.700	88.492	980.971	3.39%	40.55%
16.0	2843.722	86.941	1067.913	3.33%	44.15%
17.0	2628.258	85.213	1153.126	3.26%	47.67%
18.0	2423.035	83.285	1236.411	3.19%	51.11%
19.0	2226.322	80.889	1317.3	3.10%	54.46%
20.0	2057.147	78.399	1395.699	3.00%	57.70%
21.0	1908.731	76.153	1471.852	2.92%	60.85%
22.0	1759.829	73.721	1545.574	2.82%	63.89%
23.0	1635.007	71.233	1616.806	2.73%	66.84%
24.0	1512.122	68.808	1685.614	2.63%	69.68%
25.0	1363.290	65.381	1750.995	2.50%	72.39%
26.0	1259.945	61.922	1812.916	2.37%	74.95%
27.0	1156.399	59.116	1872.033	2.26%	77.39%
28.0	1069.971	56.367	1928.4	2.16%	79.72%
29.0	966.758	53.287	1981.686	2.04%	81.92%
30.0	866.879	49.508	2031.194	1.90%	83.97%
31.0	761.264	45.309	2076.503	1.74%	85.84%
32.0	658.819	40.684	2117.187	1.56%	87.53%
33.0	562.150	35.970	2153.157	1.38%	89.01%
34.0	475.024	31.388	2184.545	1.20%	90.31%
35.0	394.678	27.010	2211.555	1.03%	91.43%
36.0	322.103	22.822	2234.377	0.87%	92.37%
37.0	271.087	19.347	2253.723	0.74%	93.17%

Zonal flux distribution table

γ(°)	Average I(cd)	Zonal F(lm)	Sum F(lm)	Eff Flux(%)	Eff Sum(%)
38.0	223.442	16.507	2270.23	0.63%	93.85%
39.0	180.363	13.783	2284.013	0.53%	94.42%
40.0	133.928	10.961	2294.975	0.42%	94.87%
41.0	103.435	8.452	2303.427	0.32%	95.22%
42.0	84.393	6.824	2310.251	0.26%	95.51%
43.0	71.178	5.763	2316.014	0.22%	95.74%
44.0	61.193	4.996	2321.01	0.19%	95.95%
45.0	53.658	4.414	2325.424	0.17%	96.13%
46.0	47.867	3.970	2329.394	0.15%	96.30%
47.0	43.660	3.640	2333.035	0.14%	96.45%
48.0	40.028	3.383	2336.418	0.13%	96.59%
49.0	37.343	3.177	2339.595	0.12%	96.72%
50.0	35.329	3.030	2342.625	0.12%	96.84%
51.0	33.641	2.918	2345.543	0.11%	96.97%
52.0	32.437	2.835	2348.378	0.11%	97.08%
53.0	31.565	2.784	2351.162	0.11%	97.20%
54.0	30.894	2.753	2353.915	0.11%	97.31%
55.0	30.368	2.735	2356.65	0.10%	97.42%
56.0	29.967	2.726	2359.376	0.10%	97.54%
57.0	29.566	2.722	2362.098	0.10%	97.65%
58.0	29.130	2.714	2364.813	0.10%	97.76%
59.0	28.549	2.697	2367.509	0.10%	97.87%
60.0	27.801	2.662	2370.171	0.10%	97.98%
61.0	26.833	2.607	2372.779	0.10%	98.09%
62.0	25.636	2.528	2375.307	0.10%	98.20%
63.0	24.404	2.434	2377.741	0.09%	98.30%
64.0	23.096	2.331	2380.071	0.09%	98.39%
65.0	21.733	2.219	2382.29	0.08%	98.48%
66.0	20.391	2.102	2384.392	0.08%	98.57%
67.0	19.187	1.990	2386.382	0.08%	98.65%
68.0	18.142	1.891	2388.273	0.07%	98.73%
69.0	17.277	1.807	2390.08	0.07%	98.81%
70.0	16.578	1.739	2391.818	0.07%	98.88%
71.0	16.018	1.685	2393.503	0.06%	98.95%
72.0	15.499	1.639	2395.142	0.06%	99.02%
73.0	15.035	1.597	2396.739	0.06%	99.08%
74.0	14.655	1.561	2398.3	0.06%	99.15%
75.0	14.205	1.525	2399.824	0.06%	99.21%

Zonal flux distribution table

γ(°)	Average I(cd)	Zonal F(lm)	Sum F(lm)	Eff Flux(%)	Eff Sum(%)
76.0	13.852	1.489	2401.314	0.06%	99.27%
77.0	13.479	1.457	2402.771	0.06%	99.33%
78.0	13.105	1.423	2404.194	0.05%	99.39%
79.0	12.745	1.389	2405.583	0.05%	99.45%
80.0	12.420	1.357	2406.94	0.05%	99.50%
81.0	12.081	1.325	2408.265	0.05%	99.56%
82.0	11.776	1.294	2409.558	0.05%	99.61%
83.0	11.458	1.263	2410.821	0.05%	99.66%
84.0	11.188	1.234	2412.055	0.05%	99.72%
85.0	10.932	1.207	2413.262	0.05%	99.77%
86.0	10.697	1.182	2414.445	0.05%	99.81%
87.0	10.476	1.159	2415.604	0.04%	99.86%
88.0	10.233	1.134	2416.738	0.04%	99.91%
89.0	10.047	1.112	2417.85	0.04%	99.95%
90.0	9.950	1.096	2418.946	0.04%	100.00%

Zonal flux distribution table

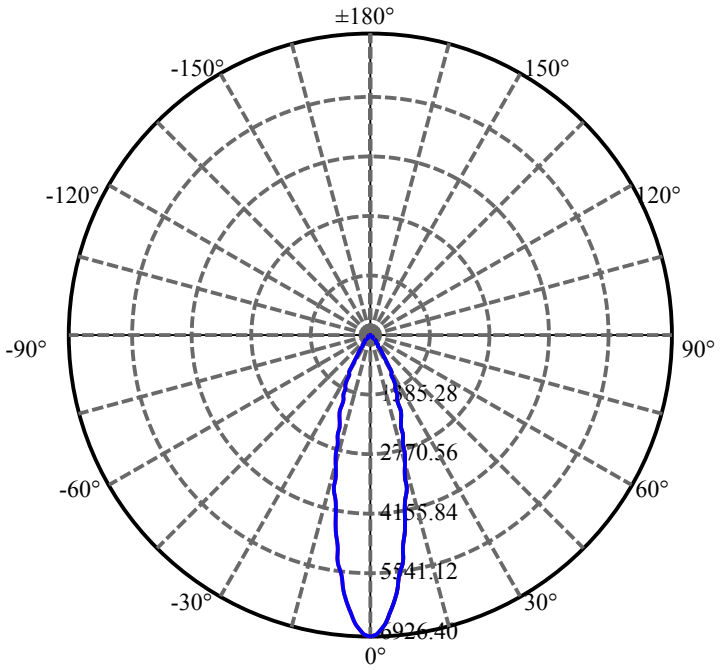
ZONAL LUMEN SUMMARY

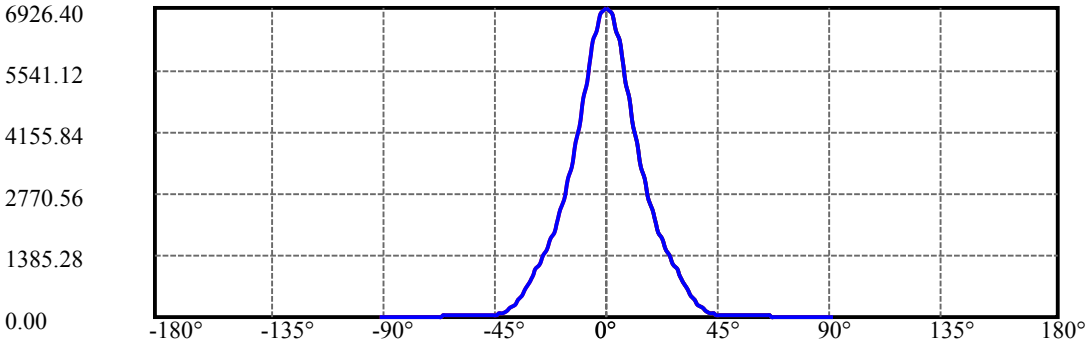
Zone	Lumens	%Lamp	%Fixt
0-30	2031.19	77.78%	83.97%
0-40	2294.97	87.88%	94.87%
0-60	2370.17	90.76%	97.98%
0-90	2417.85	92.59%	99.95%
0-120	2417.85	92.59%	99.95%
0-180	2418.95	92.63%	100.00%
60-90	47.68	1.83%	1.97%
90-120	0.00	0.00%	0.00%
90-130	0.00	0.00%	0.00%
90-150	0.00	0.00%	0.00%
90-180	0.00	0.00%	0.00%
0-28.13	1935.16	74.10%	80.00%

ZONAL LUMEN SUMMARY

0-10	536.11
10-20	859.58
20-30	635.49
30-40	263.78
40-50	47.65
50-60	27.55
60-70	21.65
70-80	15.12
80-90	10.91
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):

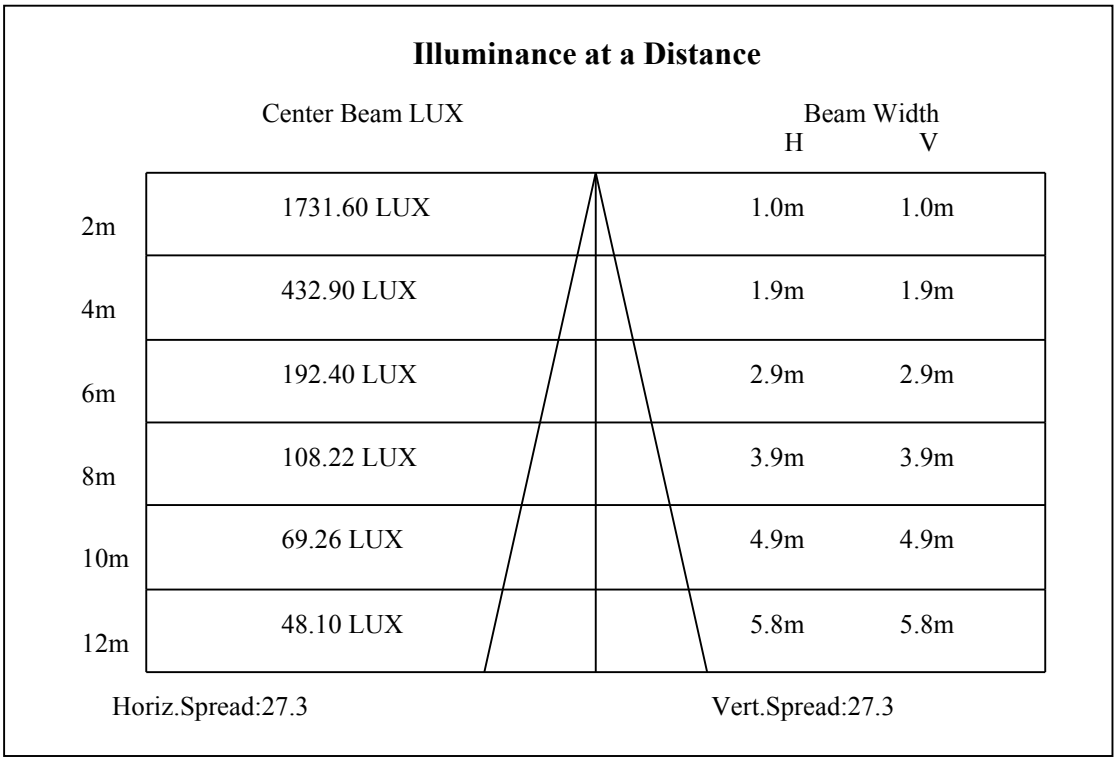
C0/C180:

C90/C270:

Field angle(10%Imax):C0/180Left:31.7 Right:31.7
:C90/270Left:31.7 Right:31.7

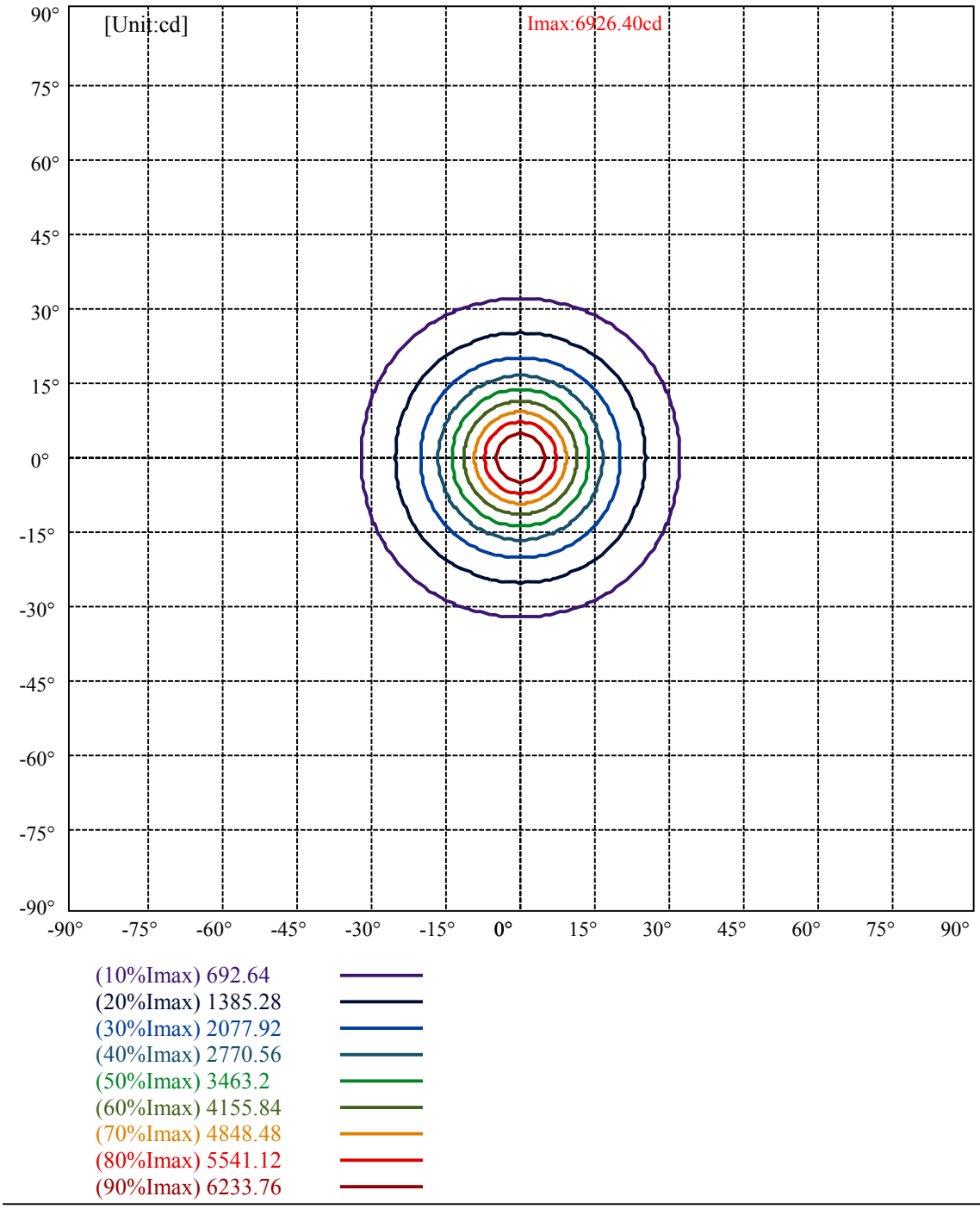
Beam Angle(50%Imax):C0/180Left:13.6 Right:13.6
:C90/270Left:13.6 Right:13.6

Lux distance Curve



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

ISO-Intensity(V-H)

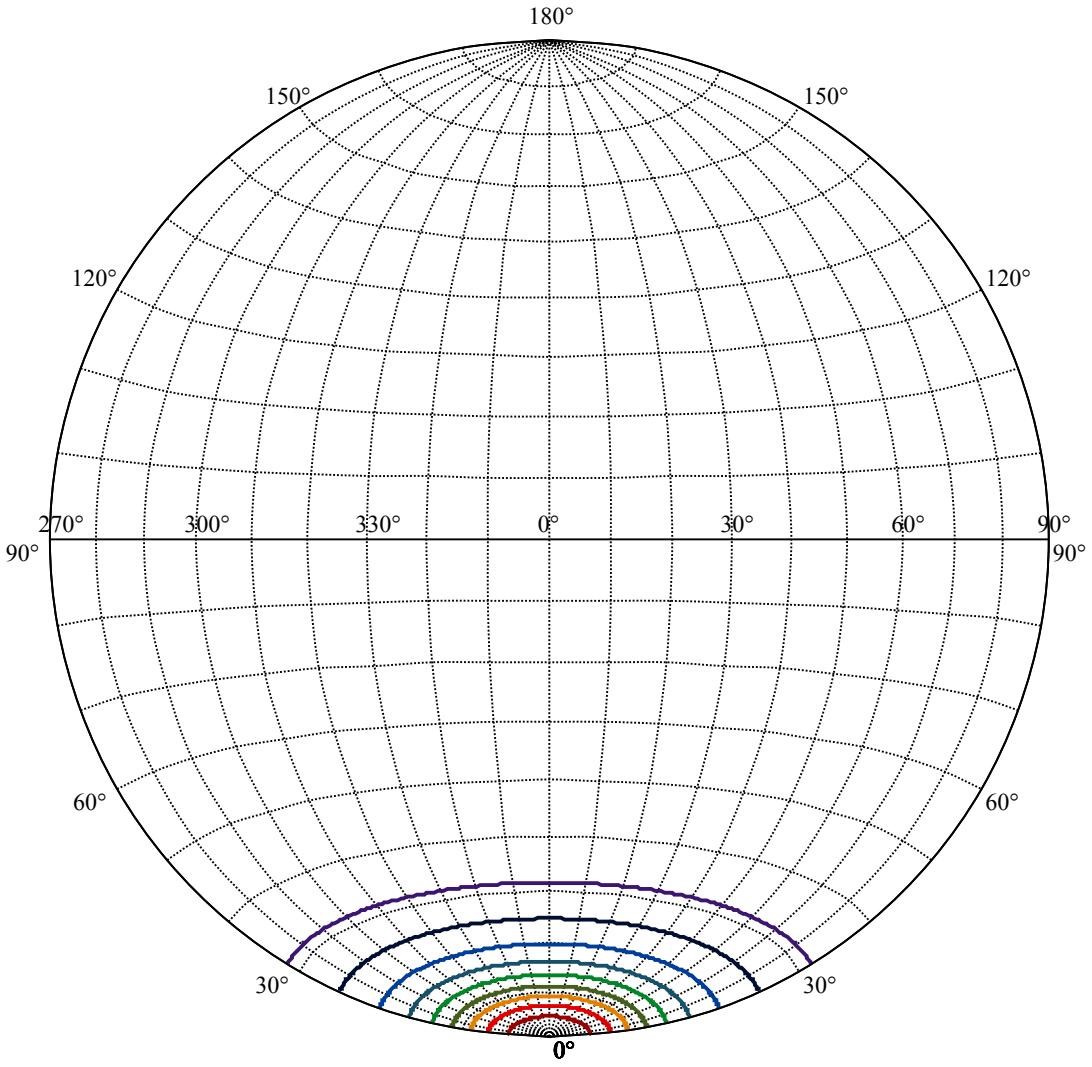


Equipment: GMS1980
Temperature(°C): 0.0

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

Operator: NT07
Distance(m): 7.44

ISO candela diagram on circular web



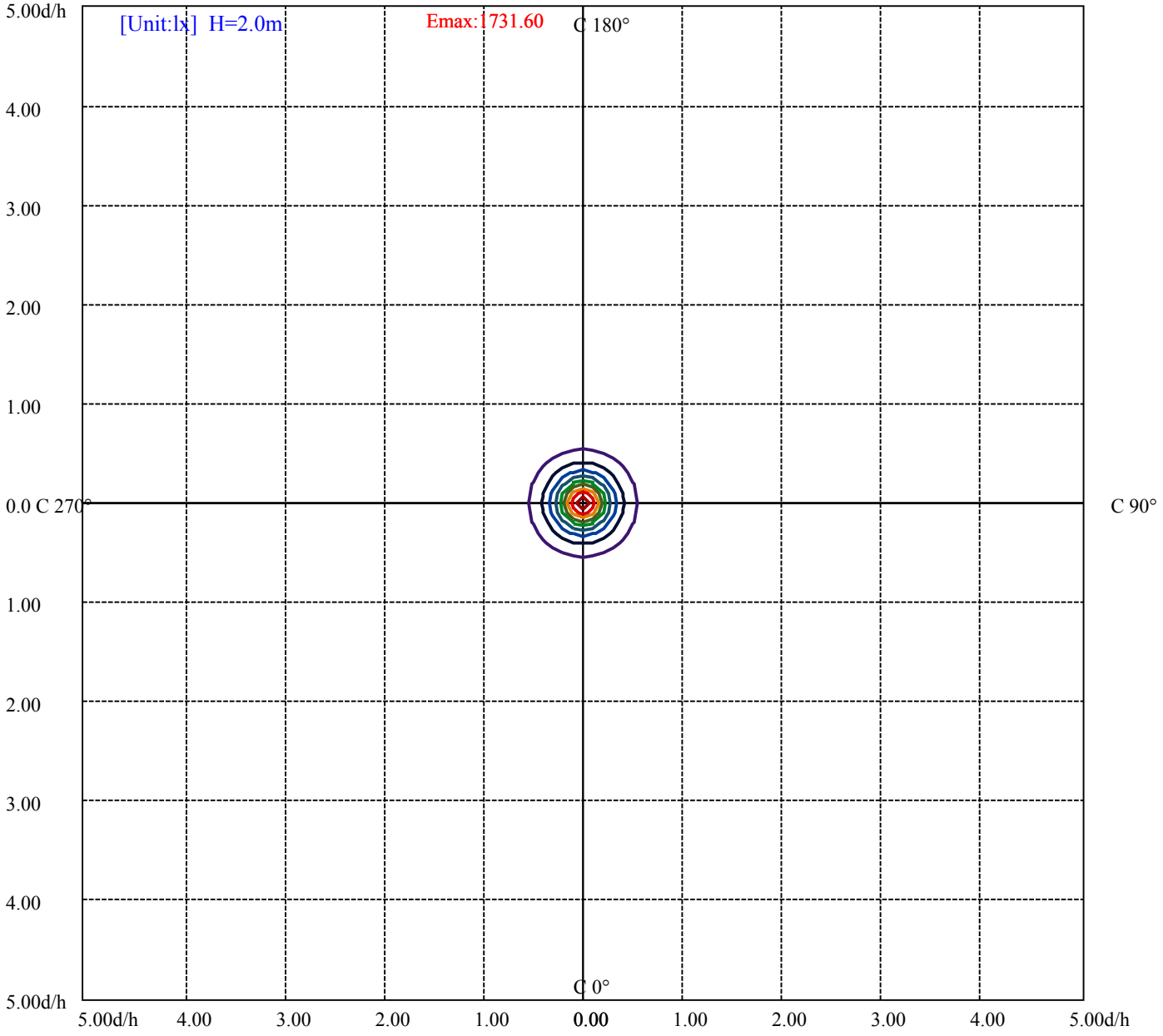
House [Unit:cd] Road

Imax:6926.40

(10%Imax) 692.64
(20%Imax) 1385.28
(30%Imax) 2077.92
(40%Imax) 2770.56
(50%Imax) 3463.2
(60%Imax) 4155.84
(70%Imax) 4848.48
(80%Imax) 5541.12
(90%Imax) 6233.76

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

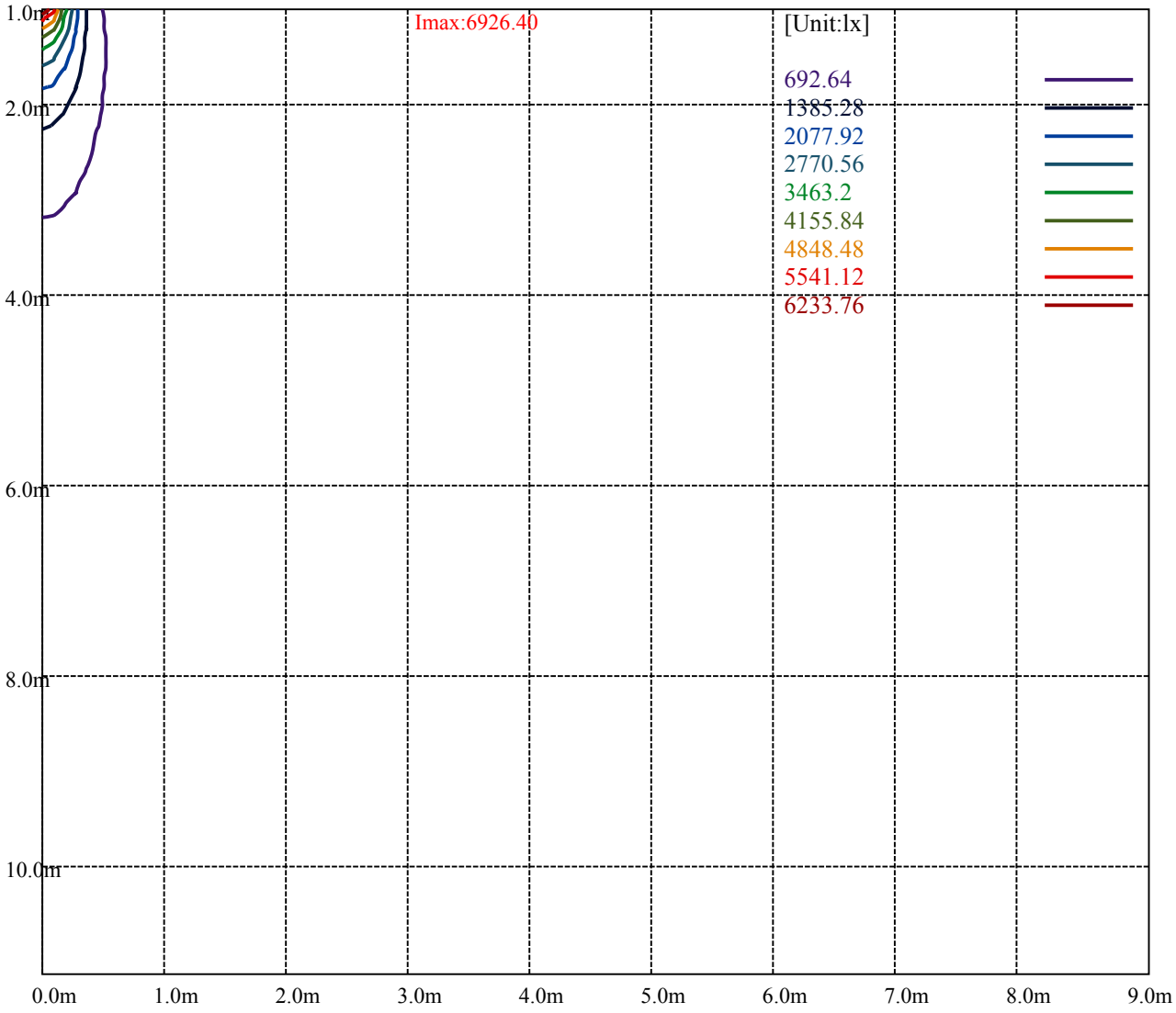
ISO illuminance diagram



(10%Emax) 173.1597
(20%Emax) 346.32
(30%Emax) 519.48
(40%Emax) 692.64
(50%Emax) 865.8
(60%Emax) 1038.958
(70%Emax) 1212.118
(80%Emax) 1385.277
(90%Emax) 1558.438

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

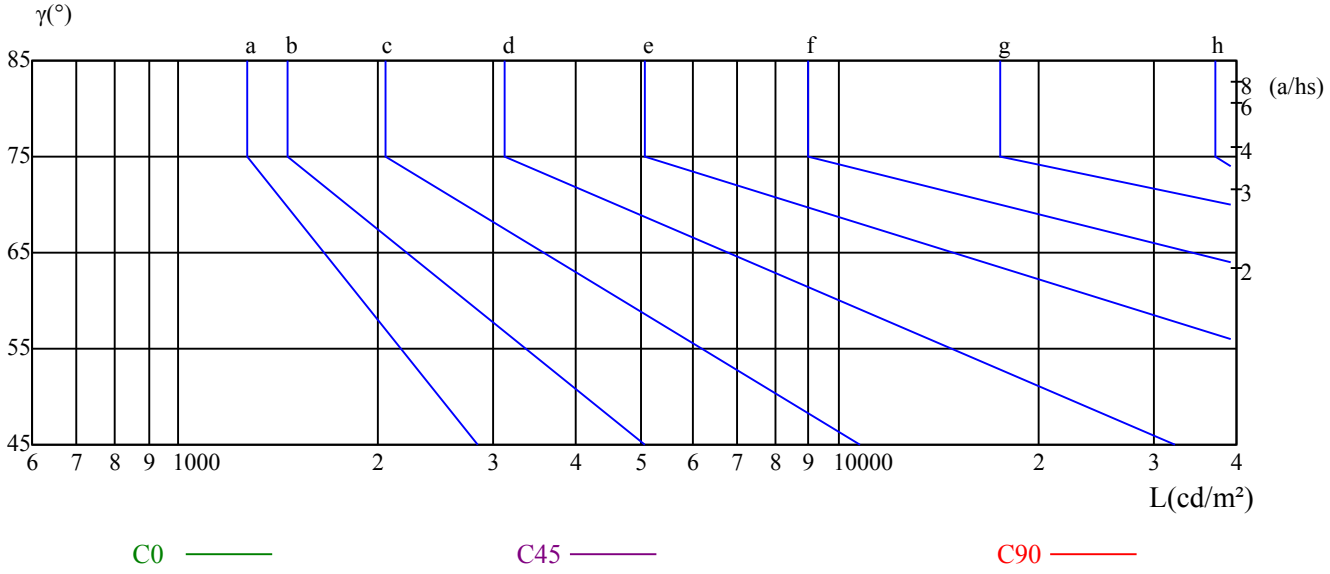
γ	45	50	55	60	65	70	75	80	85
C0	0	0	0	0	0	0	0	0	0
C45	0	0	0	0	0	0	0	0	0
C90	0	0	0	0	0	0	0	0	0

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

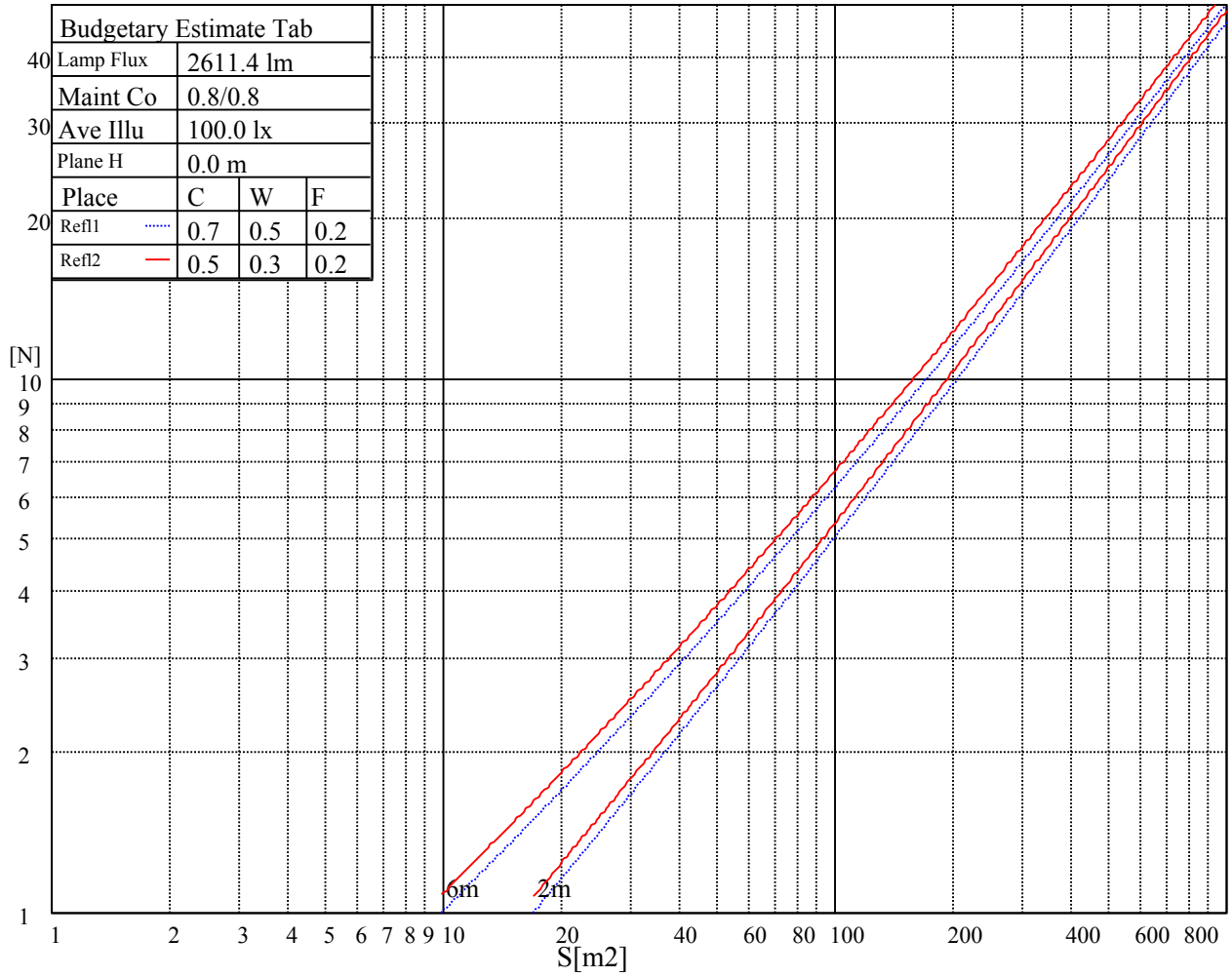


Illumination assessment according UGR										
Rf of Ceiling	70	70	50	50	30	70	70	50	50	30
Rf of Wall	50	30	50	30	30	50	30	50	30	30
Rf of Floor	20	20	20	20	20	20	20	20	20	20
Room dimensions	Viewed crosswise					Viewed endwise				
X Y										
2H 2H	非数字	非数字	非数字	非数字	非数字	非数字	非数字	非数字	非数字	非数字
3H	非数字	非数字	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

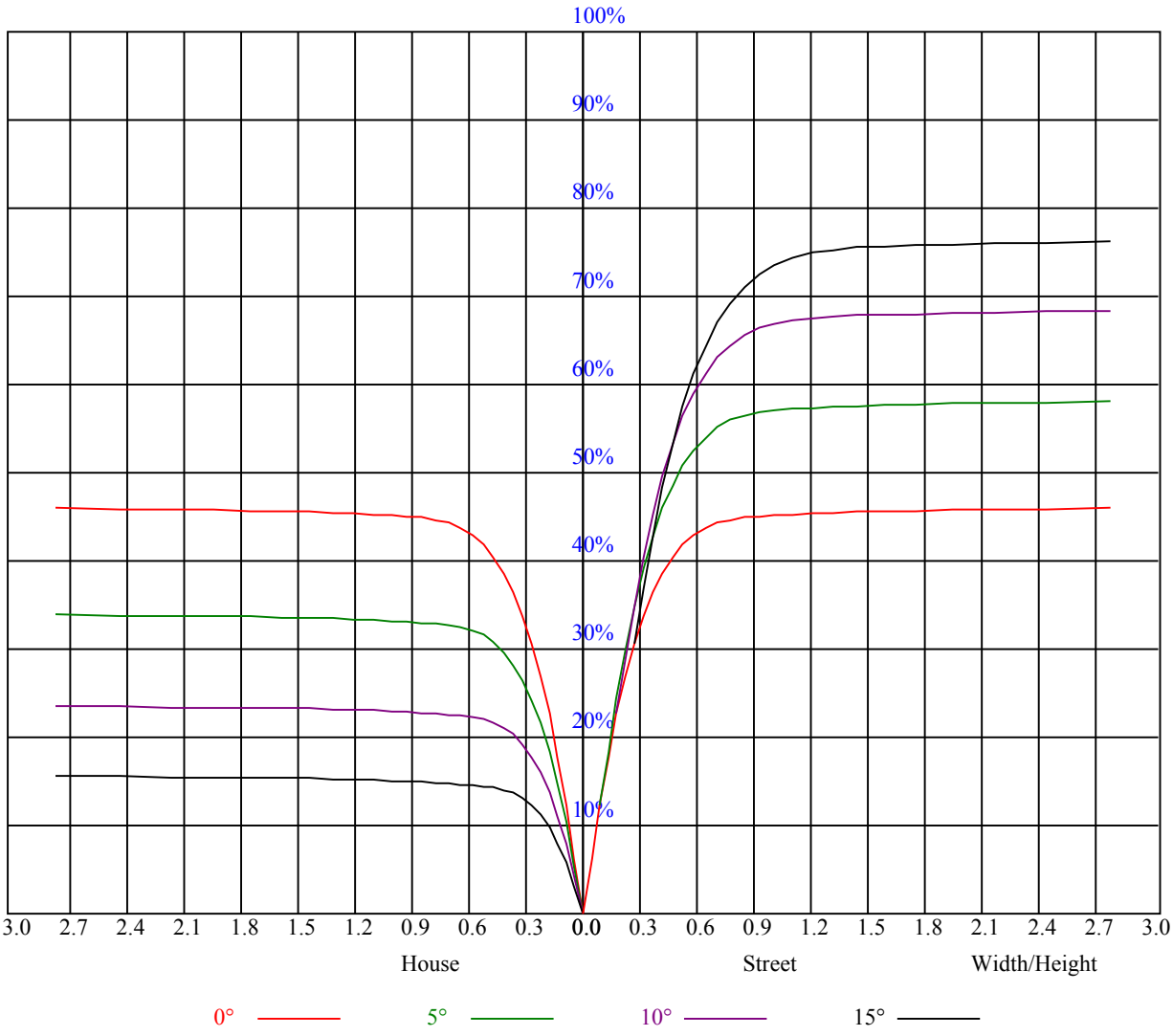


Equipment: GMS1980 Date: 2023/10/19 Operator: NT07
Temperature(°C): 0.0 Humidity(%): 0.0% Distance(m): 7.44

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	1.10	1.10	1.10	1.08	1.08	1.08	1.03	1.03	1.03	0.99	0.99	0.99	0.95	0.95	0.95	0.93
1	1.03	1.01	0.99	1.01	0.99	0.97	0.97	0.96	0.94	0.94	0.93	0.92	0.91	0.90	0.89	0.87
2	0.97	0.94	0.91	0.95	0.92	0.90	0.92	0.90	0.88	0.90	0.88	0.86	0.87	0.86	0.84	0.83
3	0.92	0.87	0.84	0.90	0.86	0.83	0.88	0.85	0.82	0.86	0.83	0.81	0.84	0.81	0.80	0.78
4	0.87	0.82	0.79	0.86	0.82	0.78	0.84	0.80	0.77	0.82	0.79	0.76	0.80	0.78	0.76	0.74
5	0.82	0.78	0.74	0.82	0.77	0.74	0.80	0.76	0.73	0.78	0.75	0.73	0.77	0.74	0.72	0.71
6	0.78	0.74	0.70	0.78	0.73	0.70	0.76	0.73	0.70	0.75	0.72	0.69	0.74	0.71	0.69	0.68
7	0.75	0.70	0.67	0.74	0.70	0.67	0.73	0.69	0.66	0.72	0.69	0.66	0.71	0.68	0.66	0.65
8	0.72	0.67	0.64	0.71	0.67	0.64	0.70	0.66	0.63	0.69	0.66	0.63	0.69	0.65	0.63	0.62
9	0.69	0.64	0.61	0.68	0.64	0.61	0.68	0.63	0.61	0.67	0.63	0.60	0.66	0.63	0.60	0.59
10	0.66	0.61	0.58	0.66	0.61	0.58	0.65	0.61	0.58	0.64	0.61	0.58	0.64	0.60	0.58	0.57

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	6863.29	6718.27	6499.07	6298.69	6029.11	5670.42	5374.28	5068.73	4737.16
45.0	6946.32	6910.34	6795.21	6573.79	6365.66	6119.34	5847.00	5471.15	5166.15
90.0	6938.02	6791.33	6617.52	6430.43	6191.30	5907.89	5543.66	5228.15	4900.45
135.0	6957.95	6960.16	6861.08	6707.20	6467.51	6237.24	5970.44	5671.53	5297.34
180.0	6863.29	6949.09	6972.34	6918.65	6781.92	6548.88	6358.47	6092.77	5816.56
225.0	6946.32	6967.91	6884.33	6727.12	6515.12	6284.29	6012.51	5644.41	5308.41
270.0	6938.02	6953.52	6954.07	6835.62	6686.71	6512.35	6229.49	5953.28	5564.14
315.0	6957.95	6916.99	6751.48	6587.08	6396.66	6155.87	5799.40	5485.54	5158.40
360.0	6863.29	6718.27	6499.07	6298.69	6029.11	5670.42	5374.28	5068.73	4737.16

C/γ(°)	9.0	10.0	11.0	12.0	13.0	14.0	15.0	16.0	17.0
0.0	4333.08	4047.46	3765.15	3499.45	3183.94	2940.38	2718.42	2466.56	2289.42
45.0	4853.96	4515.19	4146.54	3873.09	3533.22	3278.59	3038.36	2755.50	2551.25
90.0	4485.30	4199.12	3915.16	3568.09	3314.02	3010.68	2794.80	2589.44	2408.44
135.0	4981.82	4651.92	4333.63	3990.99	3712.57	3454.06	3141.32	2903.85	2692.40
180.0	5434.62	5125.74	4798.05	4386.22	4096.17	3812.20	3486.72	3240.40	2995.18
225.0	4982.93	4649.70	4279.39	4002.62	3728.06	3466.24	3146.85	2918.24	2705.13
270.0	5239.22	4909.86	4577.74	4211.30	3926.23	3635.07	3379.89	3135.23	2845.73
315.0	4822.41	4407.25	4122.18	3843.75	3574.74	3252.02	3011.24	2740.56	2538.52
360.0	4333.08	4047.46	3765.15	3499.45	3183.94	2940.38	2718.42	2466.56	2289.42

C/γ(°)	18.0	19.0	20.0	21.0	22.0	23.0	24.0	25.0	26.0
0.0	2127.79	1940.14	1804.53	1687.18	1542.15	1430.89	1326.27	1098.38	1098.38
45.0	2364.15	2199.75	2003.80	1862.10	1732.57	1611.34	1469.64	1361.70	1256.53
90.0	2200.31	2045.87	1897.52	1765.78	1610.24	1492.89	1381.63	1095.84	1095.84
135.0	2451.06	2277.25	2076.31	1934.05	1802.31	1682.75	1545.47	1434.77	1327.38
180.0	2740.00	2531.87	2347.55	2183.15	1994.39	1855.45	1730.91	1615.22	1477.39
225.0	2508.07	2282.78	2121.15	1934.05	1798.99	1679.98	1538.28	1435.32	1332.36
270.0	2640.37	2393.49	2216.36	2051.40	1873.17	1746.96	1631.27	1496.21	1396.57
315.0	2352.53	2139.42	1989.96	1852.13	1724.82	1579.79	1473.51	1368.89	1095.12
360.0	2127.79	1940.14	1804.53	1687.18	1542.15	1430.89	1326.27	1098.38	1098.38

C/γ(°)	27.0	28.0	29.0	30.0	31.0	32.0	33.0	34.0	35.0
0.0	996.70	899.61	779.32	686.00	595.11	509.42	412.11	342.58	266.03
45.0	1130.32	1030.13	932.71	810.38	714.06	599.48	516.45	440.06	369.21
90.0	1045.02	920.48	824.44	728.12	611.38	525.03	446.81	375.63	296.25
135.0	1219.99	1092.13	989.17	890.64	791.00	671.44	581.21	478.26	402.42
180.0	1373.88	1273.69	1149.14	1050.06	950.97	827.54	729.56	610.00	523.09
225.0	1088.81	1088.81	1019.17	920.97	798.14	700.78	607.67	520.32	422.90
270.0	1301.36	1206.15	1088.81	993.60	895.62	798.20	675.31	583.43	499.29
315.0	1095.12	1048.78	951.31	855.27	733.82	638.67	528.07	449.91	378.23
360.0	996.70	899.61	779.32	686.00	595.11	509.42	412.11	342.58	266.03

C/γ(°)	36.0	37.0	38.0	39.0	40.0	41.0	42.0	43.0	44.0
0.0	215.21	173.20	131.41	107.16	89.06	75.28	63.10	55.85	50.10
45.0	290.05	290.05	223.96	148.62	113.92	93.88	79.10	67.92	57.84
90.0	242.28	196.67	150.12	121.56	99.97	83.75	69.30	60.67	54.08
135.0	334.89	288.39	288.39	164.07	131.80	101.96	84.80	72.24	62.83
180.0	441.72	369.21	289.50	289.50	222.69	147.07	112.09	91.72	76.61
225.0	352.60	275.16	221.25	176.58	132.63	106.33	87.02	72.90	60.67
270.0	403.53	334.89	288.39	288.39	163.46	123.33	99.75	82.31	69.75
315.0	296.53	241.12	194.51	147.02	117.90	95.87	79.99	65.82	57.68
360.0	215.21	173.20	131.41	107.16	89.06	75.28	63.10	55.85	50.10

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	45.56	41.18	38.47	36.37	34.26	33.05	32.05	31.33	30.83
45.0	51.81	45.94	42.12	39.19	36.31	34.54	33.16	32.11	31.27
90.0	47.77	43.62	40.57	37.47	35.54	33.99	32.82	31.66	31.05
135.0	54.30	48.99	44.67	40.52	37.86	35.81	33.82	32.55	31.61
180.0	65.65	55.80	49.98	44.34	40.91	38.19	35.48	33.82	32.55
225.0	53.75	48.32	44.12	39.97	37.36	35.32	33.38	32.22	31.39
270.0	58.67	52.25	47.27	43.12	40.02	37.03	35.09	33.65	32.33
315.0	51.76	46.83	42.07	39.25	36.48	34.71	33.32	32.16	31.50
360.0	45.56	41.18	38.47	36.37	34.26	33.05	32.05	31.33	30.83

C/γ(°)	54.0	55.0	56.0	57.0	58.0	59.0	60.0	61.0	62.0
0.0	30.44	30.11	29.72	29.28	28.67	27.51	26.46	25.30	24.02
45.0	30.78	30.28	30.00	29.45	29.01	28.51	27.34	26.29	24.91
90.0	30.50	30.11	29.56	29.12	28.62	27.68	26.68	25.35	24.19
135.0	30.89	30.28	29.84	29.45	28.95	28.51	27.90	26.90	25.63
180.0	31.55	30.67	30.17	29.72	29.39	28.89	28.51	28.06	26.96
225.0	30.56	30.06	29.72	29.45	29.01	28.62	28.17	27.07	26.07
270.0	31.50	30.83	30.44	30.17	29.84	29.45	29.12	28.45	27.18
315.0	30.94	30.61	30.28	29.89	29.56	29.23	28.23	27.23	26.13
360.0	30.44	30.11	29.72	29.28	28.67	27.51	26.46	25.30	24.02

C/γ(°)	63.0	64.0	65.0	66.0	67.0	68.0	69.0	70.0	71.0
0.0	22.42	21.15	19.87	18.60	17.66	16.72	16.16	15.67	15.11
45.0	23.75	22.53	21.15	19.60	18.65	17.77	16.99	16.27	15.83
90.0	22.97	21.42	20.15	19.10	18.10	17.05	16.50	15.94	15.55
135.0	24.58	23.08	21.92	20.65	19.32	18.38	17.44	16.61	16.16
180.0	26.02	24.91	23.36	22.20	20.65	19.48	18.60	17.66	16.77
225.0	24.91	23.69	22.14	20.76	19.65	18.38	17.49	16.77	16.11
270.0	26.07	24.80	23.47	22.09	20.43	19.32	18.05	17.27	16.66
315.0	24.52	23.19	21.81	20.15	19.04	18.05	16.99	16.44	15.94
360.0	22.42	21.15	19.87	18.60	17.66	16.72	16.16	15.67	15.11

C/γ(°)	72.0	73.0	74.0	75.0	76.0	77.0	78.0	79.0	80.0
0.0	14.72	14.34	14.00	13.56	13.23	12.95	12.62	12.23	11.96
45.0	15.33	14.83	14.45	14.06	13.67	13.34	12.95	12.57	12.23
90.0	15.00	14.56	14.28	13.78	13.45	13.12	12.73	12.40	12.01
135.0	15.67	15.22	14.78	14.39	14.06	13.67	13.28	12.90	12.62
180.0	16.22	15.78	15.33	14.83	14.45	14.06	13.62	13.28	12.95
225.0	15.67	15.11	14.72	14.28	13.95	13.51	13.17	12.84	12.51
270.0	15.94	15.55	15.17	14.61	14.23	13.84	13.51	13.06	12.79
315.0	15.44	14.89	14.50	14.12	13.78	13.34	12.95	12.68	12.29
360.0	14.72	14.34	14.00	13.56	13.23	12.95	12.62	12.23	11.96

C/γ(°)	81.0	82.0	83.0	84.0	85.0	86.0	87.0	88.0	89.0
0.0	11.68	11.40	11.13	10.90	10.68	10.46	10.24	10.02	10.02
45.0	11.90	11.62	11.29	11.07	10.79	10.57	10.35	10.13	9.91
90.0	11.68	11.46	11.18	10.90	10.74	10.46	10.24	9.96	9.91
135.0	12.18	11.90	11.51	11.29	10.96	10.79	10.57	10.30	10.02
180.0	12.57	12.23	11.85	11.57	11.29	11.02	10.79	10.52	10.30
225.0	12.18	11.85	11.51	11.24	11.02	10.74	10.52	10.30	10.07
270.0	12.45	12.07	11.79	11.40	11.13	10.85	10.63	10.41	10.19
315.0	12.01	11.68	11.40	11.13	10.85	10.68	10.46	10.24	9.96
360.0	11.68	11.40	11.13	10.90	10.68	10.46	10.24	10.02	10.02

Intensity data(cd)

C/γ(°)	90.0
0.0	10.02
45.0	9.91
90.0	9.91
135.0	9.91
180.0	10.07
225.0	9.96
270.0	9.91
315.0	9.91
360.0	10.02