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Address:380JinOu Road,GaoXin Zone,Jiang Men City,Guangdong,China

NATA

Client:
LumCAT: 1-1383-L Luminaire:
92.70.410.00 Report No: 2023829-
B012 Ballast type: AC
Test No: 2023829-C012
LampCAT: LUXEON CoB 1203
LES9 Lamp flux(lm): 1615.6 Number of Lamps: 1 Length(mm): 0
Phm Type: C

Voltage(V): 35.860
Current(A): 0.378
Power (W): 13.555
PF: 0.000
Width(mm): 0
Height(mm): 0

Photometric Results

Lumens(lm): 1526.71, Efficiency(%): 94.50% , Luminous Efficacy(lm/W): 112.63
Central intensity(cd): 3274.110, Maximum intensity(cd): 3274.110
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=63.2
[C90/270]Total=63.2
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(%): 94.50%
Up flux rate of LUM(%): - -
Down flux rate of LUM(%): 100.00%
CIE Type : Direct lighting
Output flux ratio in π solid angle : 98.154%

Equipment: GMS1980 Date: 2023/8/29 Operator: NT07
Temperature(°C): 25.0 Humidity(%): 60.0% Distance(m): 7.44

Zonal flux distribution table

γ(°)	Average I(cd)	Zonal F(lm)	Sum F(lm)	Eff Flux(%)	Eff Sum(%)
0.0	3274.110	0.000	0	0.00%	0.00%
1.0	3266.637	3.130	3.13	0.19%	0.20%
2.0	3253.007	9.358	12.487	0.58%	0.82%
3.0	3224.707	15.493	27.98	0.96%	1.83%
4.0	3187.551	21.464	49.444	1.33%	3.24%
5.0	3136.764	27.207	76.651	1.68%	5.02%
6.0	3085.008	32.697	109.348	2.02%	7.16%
7.0	3031.661	37.966	147.314	2.35%	9.65%
8.0	2970.565	42.957	190.27	2.66%	12.46%
9.0	2908.223	47.644	237.915	2.95%	15.58%
10.0	2833.288	51.959	289.873	3.22%	18.99%
11.0	2755.724	55.846	345.719	3.46%	22.64%
12.0	2663.076	59.235	404.954	3.67%	26.52%
13.0	2556.589	61.944	466.899	3.83%	30.58%
14.0	2450.033	64.084	530.983	3.97%	34.78%
15.0	2327.218	65.584	596.567	4.06%	39.08%
16.0	2191.255	66.208	662.775	4.10%	43.41%
17.0	2044.776	65.966	728.742	4.08%	47.73%
18.0	1909.298	65.194	793.936	4.04%	52.00%
19.0	1760.743	63.851	857.787	3.95%	56.19%
20.0	1621.805	61.910	919.697	3.83%	60.24%
21.0	1480.653	59.573	979.271	3.69%	64.14%
22.0	1283.629	55.549	1034.82	3.44%	67.78%
23.0	1180.104	51.696	1086.516	3.20%	71.17%
24.0	1072.441	49.249	1135.764	3.05%	74.39%
25.0	966.142	46.353	1182.117	2.87%	77.43%
26.0	859.953	43.105	1225.223	2.67%	80.25%
27.0	750.733	39.406	1264.628	2.44%	82.83%
28.0	646.572	35.377	1300.005	2.19%	85.15%
29.0	542.182	31.101	1331.106	1.93%	87.19%
30.0	454.882	26.921	1358.027	1.67%	88.95%
31.0	370.489	22.969	1380.996	1.42%	90.46%
32.0	296.266	19.102	1400.097	1.18%	91.71%
33.0	244.857	15.942	1416.039	0.99%	92.75%
34.0	206.344	13.655	1429.694	0.85%	93.65%
35.0	123.432	10.242	1439.935	0.63%	94.32%
36.0	91.327	6.838	1446.773	0.42%	94.76%
37.0	72.133	5.331	1452.104	0.33%	95.11%

Zonal flux distribution table

γ(°)	Average I(cd)	Zonal F(lm)	Sum F(lm)	Eff Flux(%)	Eff Sum(%)
38.0	60.412	4.424	1456.529	0.27%	95.40%
39.0	52.067	3.839	1460.368	0.24%	95.65%
40.0	45.701	3.410	1463.778	0.21%	95.88%
41.0	40.339	3.064	1466.841	0.19%	96.08%
42.0	36.063	2.776	1469.617	0.17%	96.26%
43.0	32.098	2.525	1472.142	0.16%	96.43%
44.0	28.805	2.299	1474.441	0.14%	96.58%
45.0	26.016	2.107	1476.548	0.13%	96.71%
46.0	23.802	1.948	1478.496	0.12%	96.84%
47.0	22.093	1.825	1480.321	0.11%	96.96%
48.0	20.550	1.724	1482.045	0.11%	97.07%
49.0	19.367	1.639	1483.684	0.10%	97.18%
50.0	18.239	1.568	1485.252	0.10%	97.28%
51.0	17.319	1.504	1486.757	0.09%	97.38%
52.0	16.495	1.451	1488.208	0.09%	97.48%
53.0	15.797	1.405	1489.612	0.09%	97.57%
54.0	15.201	1.366	1490.979	0.08%	97.66%
55.0	14.572	1.329	1492.308	0.08%	97.75%
56.0	14.081	1.295	1493.602	0.08%	97.83%
57.0	13.582	1.265	1494.867	0.08%	97.91%
58.0	13.202	1.239	1496.106	0.08%	98.00%
59.0	12.821	1.217	1497.322	0.08%	98.08%
60.0	12.461	1.194	1498.517	0.07%	98.15%
61.0	12.129	1.174	1499.69	0.07%	98.23%
62.0	11.818	1.154	1500.844	0.07%	98.31%
63.0	11.541	1.136	1501.98	0.07%	98.38%
64.0	11.258	1.119	1503.099	0.07%	98.45%
65.0	11.029	1.103	1504.202	0.07%	98.53%
66.0	10.780	1.088	1505.29	0.07%	98.60%
67.0	10.517	1.071	1506.361	0.07%	98.67%
68.0	10.296	1.054	1507.415	0.07%	98.74%
69.0	10.040	1.037	1508.453	0.06%	98.80%
70.0	9.839	1.021	1509.474	0.06%	98.87%
71.0	9.618	1.006	1510.479	0.06%	98.94%
72.0	9.417	0.990	1511.469	0.06%	99.00%
73.0	9.223	0.975	1512.444	0.06%	99.07%
74.0	9.050	0.961	1513.405	0.06%	99.13%
75.0	8.863	0.946	1514.351	0.06%	99.19%

Zonal flux distribution table

γ(°)	Average I(cd)	Zonal F(lm)	Sum F(lm)	Eff Flux(%)	Eff Sum(%)
76.0	8.670	0.931	1515.282	0.06%	99.25%
77.0	8.518	0.916	1516.198	0.06%	99.31%
78.0	8.317	0.901	1517.099	0.06%	99.37%
79.0	8.144	0.884	1517.984	0.05%	99.43%
80.0	7.943	0.867	1518.851	0.05%	99.49%
81.0	7.777	0.850	1519.701	0.05%	99.54%
82.0	7.625	0.835	1520.536	0.05%	99.60%
83.0	7.466	0.820	1521.357	0.05%	99.65%
84.0	7.286	0.804	1522.16	0.05%	99.70%
85.0	7.161	0.789	1522.949	0.05%	99.75%
86.0	7.016	0.775	1523.724	0.05%	99.80%
87.0	6.892	0.761	1524.485	0.05%	99.85%
88.0	6.808	0.750	1525.235	0.05%	99.90%
89.0	6.698	0.740	1525.976	0.05%	99.95%
90.0	6.608	0.730	1526.705	0.05%	100.00%

Zonal flux distribution table

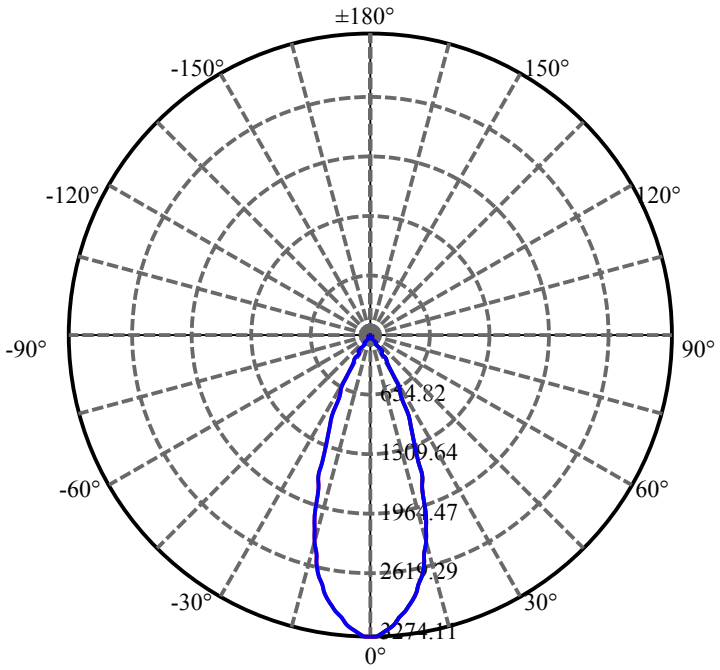
ZONAL LUMEN SUMMARY

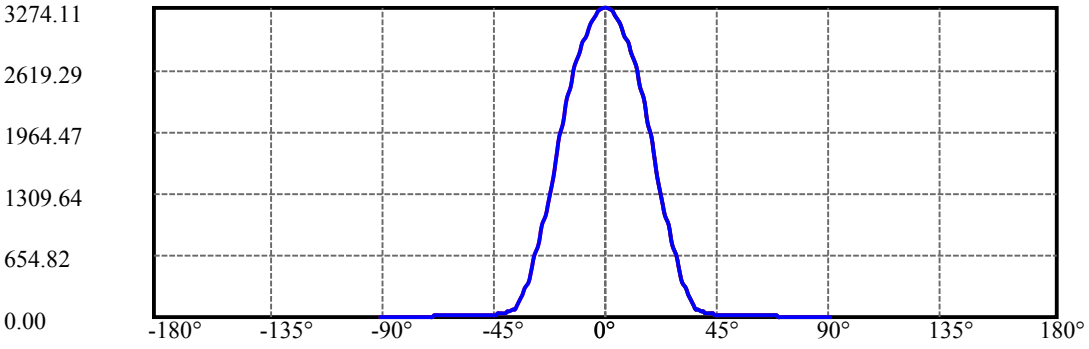
Zone	Lumens	%Lamp	%Fixt
0-30	1358.03	84.06%	88.95%
0-40	1463.78	90.60%	95.88%
0-60	1498.52	92.75%	98.15%
0-90	1525.98	94.45%	99.95%
0-120	1525.98	94.45%	99.95%
0-180	1526.71	94.50%	100.00%
60-90	27.46	1.70%	1.80%
90-120	0.00	0.00%	0.00%
90-130	0.00	0.00%	0.00%
90-150	0.00	0.00%	0.00%
90-180	0.00	0.00%	0.00%
0-25.91	1221.36	75.60%	80.00%

ZONAL LUMEN SUMMARY

0-10	289.87
10-20	629.82
20-30	438.33
30-40	105.75
40-50	21.47
50-60	13.26
60-70	10.96
70-80	9.38
80-90	7.12
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):

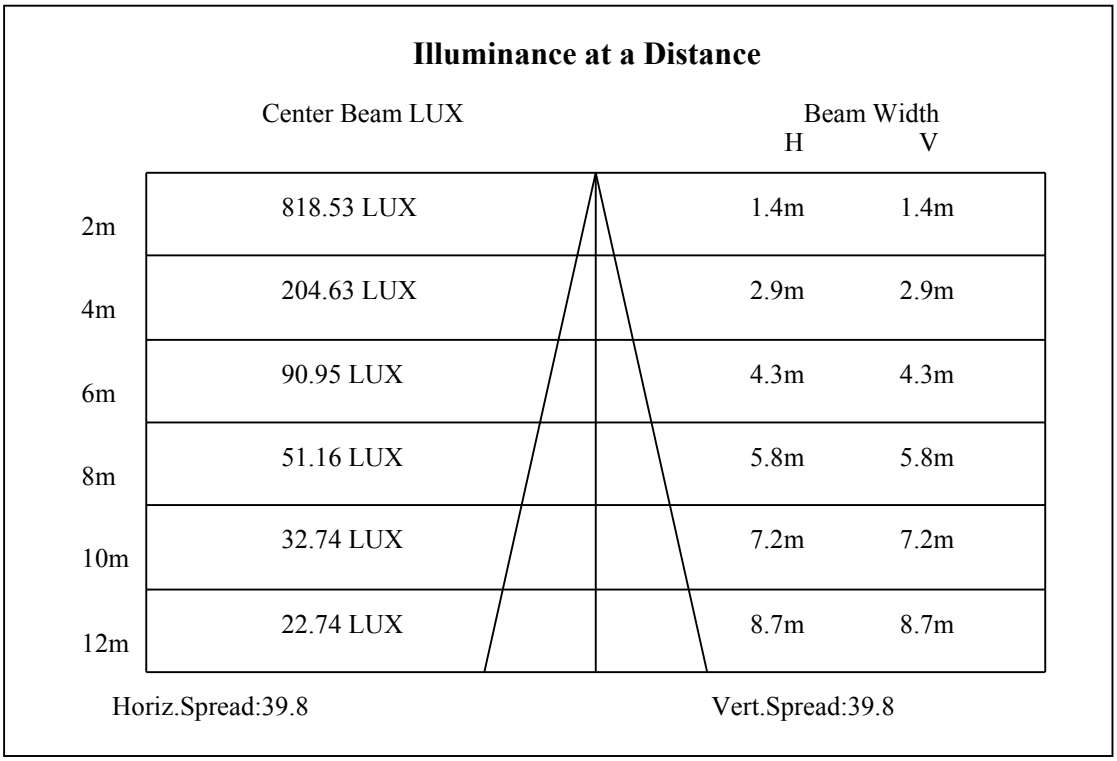
C0/C180:

C90/C270:

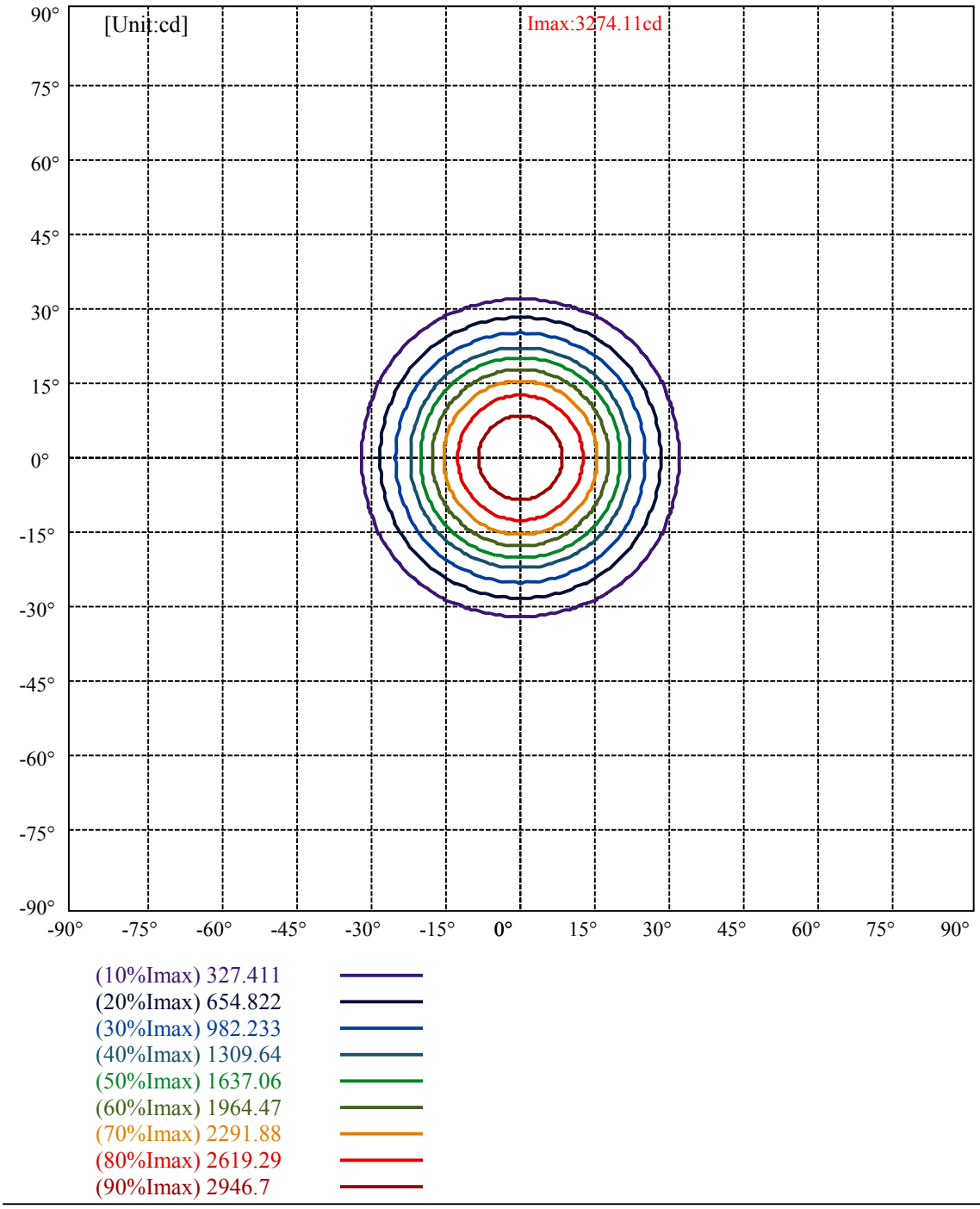
Field angle(10%Imax):C0/180Left:31.6 Right:31.6
:C90/270Left:31.6 Right:31.6

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

Lux distance Curve



ISO-Intensity(V-H)

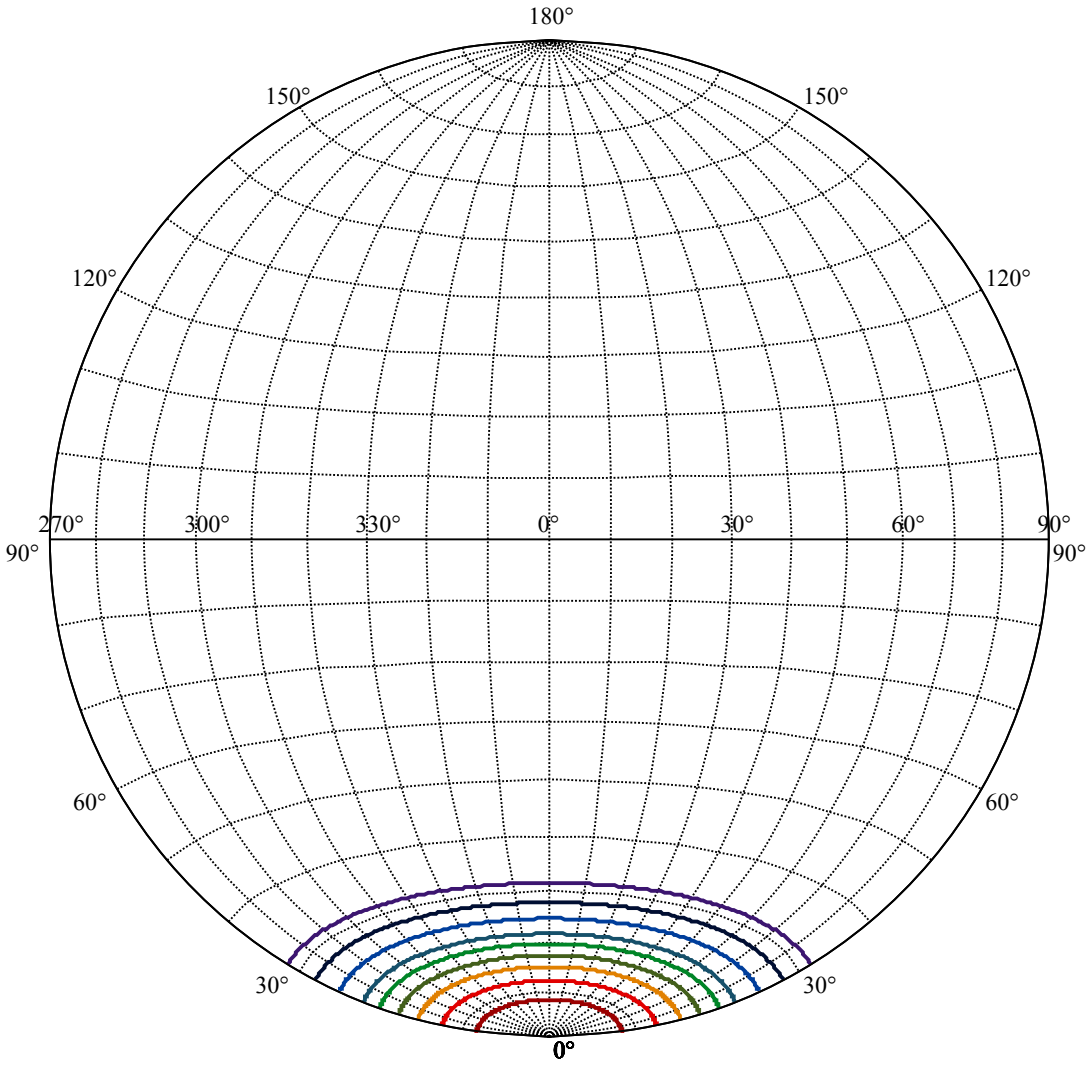


Equipment: GMS1980
Temperature(°C): 25.0

Date: 2023/8/29
Humidity(%): 60.0%

Operator: NT07
Distance(m): 7.44

ISO candela diagram on circular web



House [Unit:cd] Road

Imax:3274.11

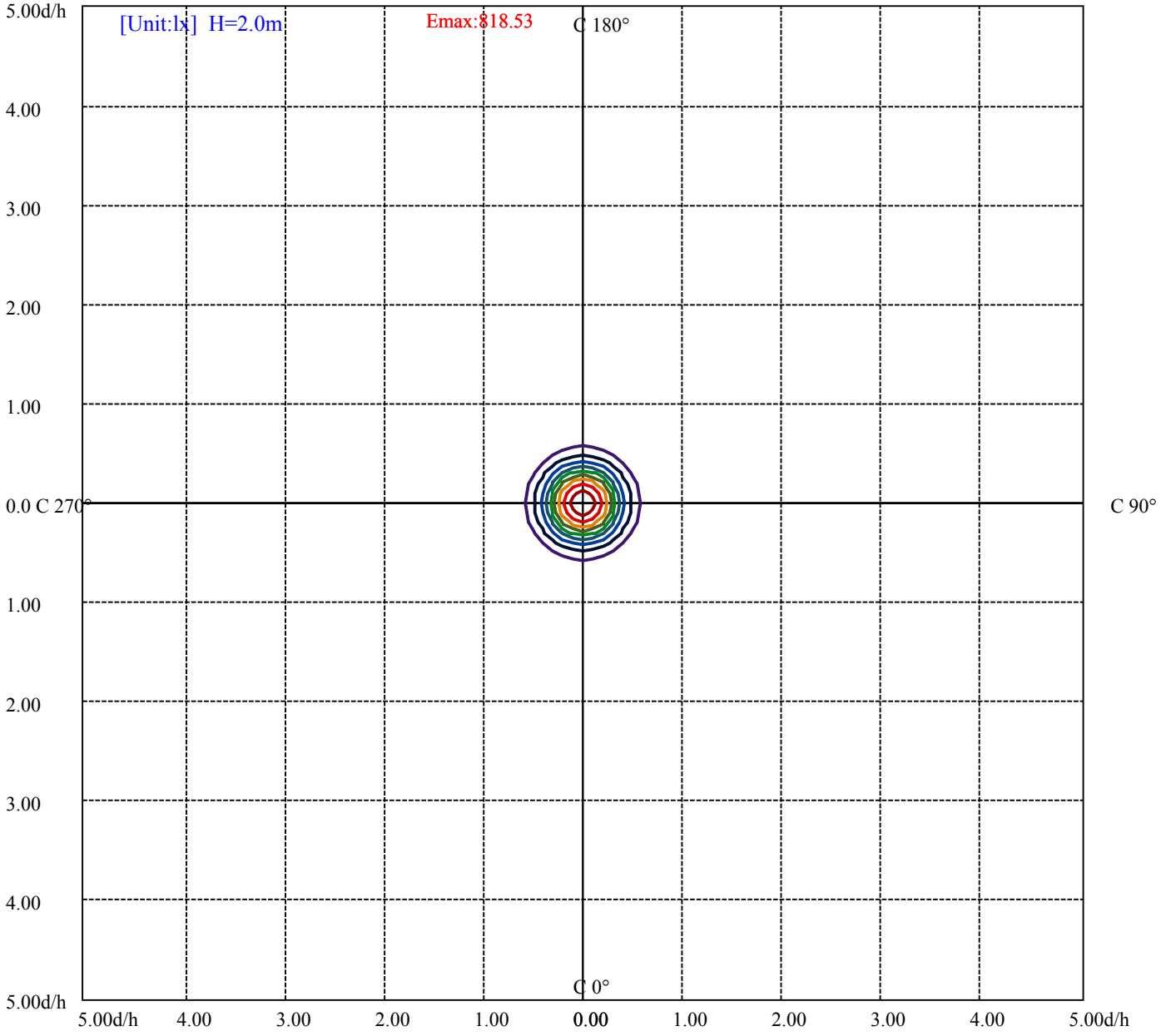
(10%Imax) 327.411
(20%Imax) 654.822
(30%Imax) 982.233
(40%Imax) 1309.64
(50%Imax) 1637.06
(60%Imax) 1964.47
(70%Imax) 2291.88
(80%Imax) 2619.29
(90%Imax) 2946.7

Equipment: GMS1980
Temperature(°C): 25.0

Date: 2023/8/29
Humidity(%): 60.0%

Operator: NT07
Distance(m): 7.44

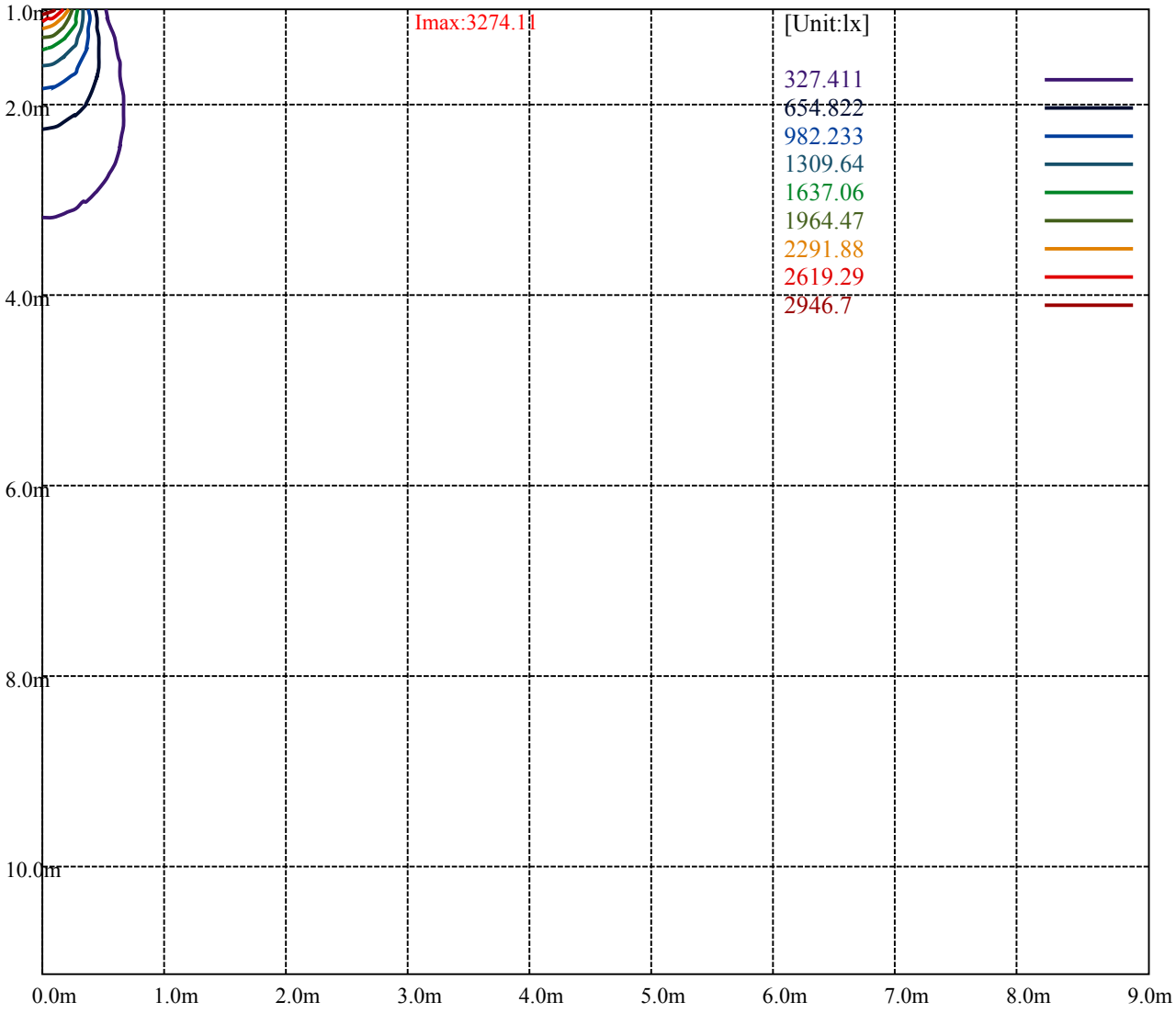
ISO illuminance diagram



(10%Emax) 81.85275
(20%Emax) 163.7055
(30%Emax) 245.5582
(40%Emax) 327.41
(50%Emax) 409.2625
(60%Emax) 491.1175
(70%Emax) 572.97
(80%Emax) 654.8225
(90%Emax) 736.675

Equipment: GMS1980
Temperature(°C): 25.0
Date: 2023/8/29
Humidity(%): 60.0%
Operator: NT07
Distance(m): 7.44

Space ISO Lux diagram



Equipment: GMS1980
Temperature(°C): 25.0

Date: 2023/8/29
Humidity(%): 60.0%

Operator: NT07
Distance(m): 7.44

Luminance Limitting Curve(no luminous side)

Luminance Table

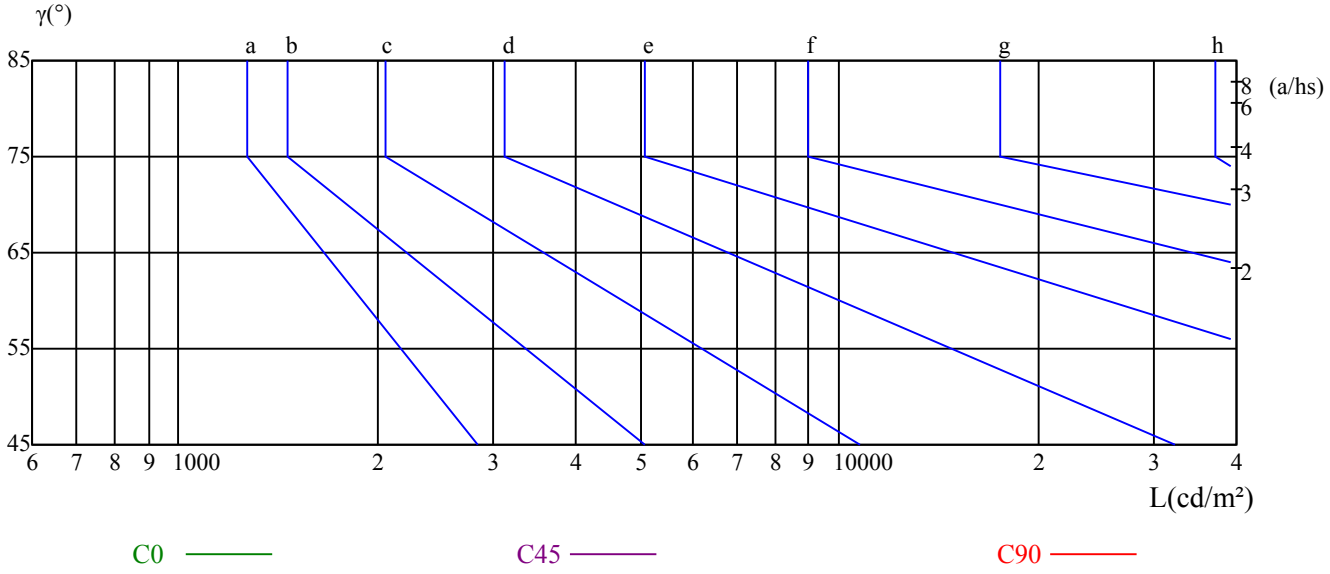
γ	45	50	55	60	65	70	75	80	85
C0	0	0	0	0	0	0	0	0	0
C45	0	0	0	0	0	0	0	0	0
C90	0	0	0	0	0	0	0	0	0

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

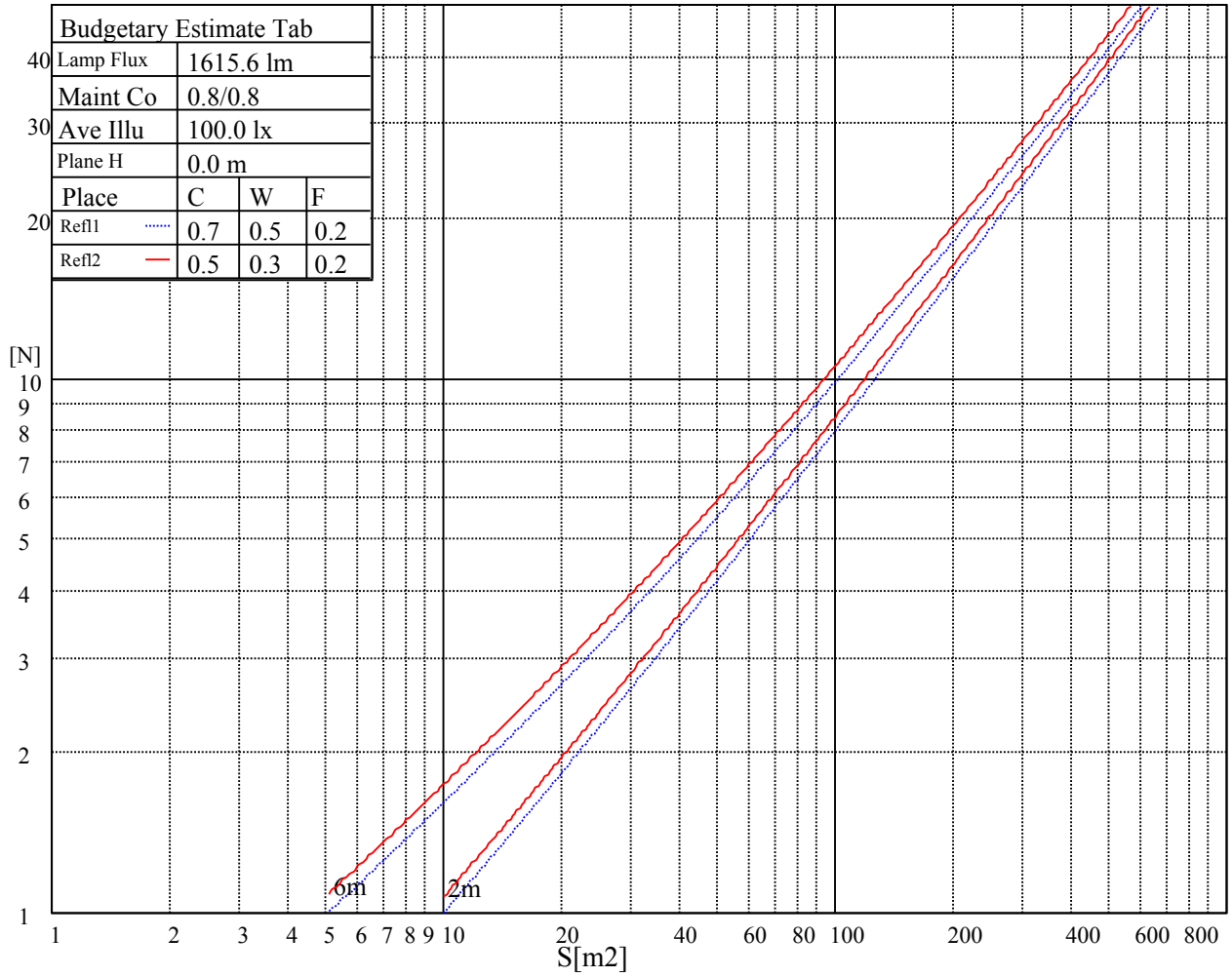
Luminance Limitting Curve



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

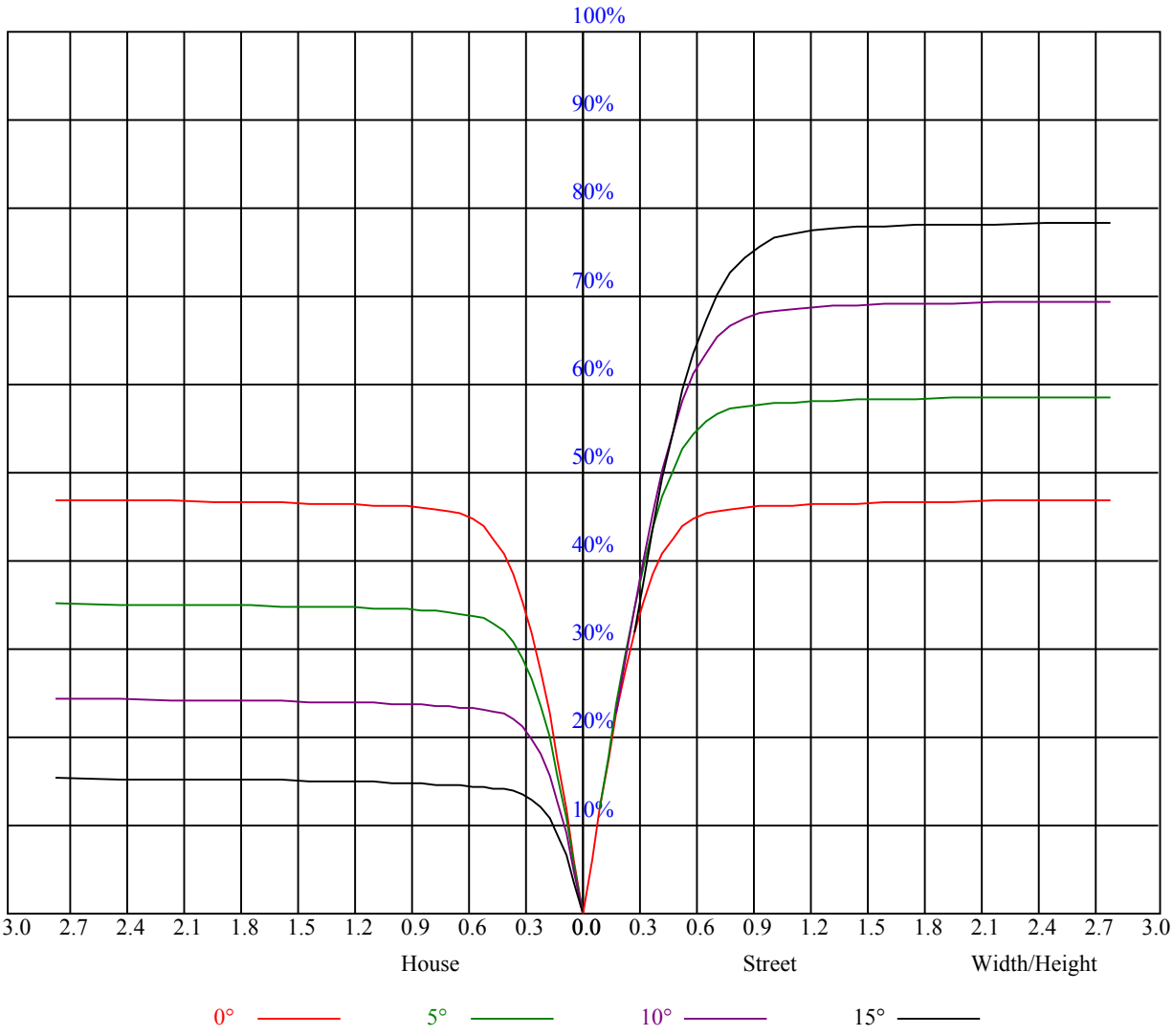


Equipment: GMS1980 Date: 2023/8/29 Operator: NT07
Temperature(°C): 25.0 Humidity(%): 60.0% Distance(m): 7.44

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	1.10	1.10	1.10	1.05	1.05	1.05	1.01	1.01	1.01	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	0.93	0.98	0.94	0.92	0.95	0.92	0.90	0.92	0.90	0.88	0.89	0.88	0.86	0.85
3	0.94	0.90	0.86	0.92	0.89	0.86	0.90	0.87	0.84	0.88	0.85	0.83	0.86	0.84	0.82	0.80
4	0.89	0.84	0.81	0.88	0.84	0.80	0.86	0.82	0.80	0.84	0.81	0.79	0.82	0.80	0.78	0.76
5	0.85	0.80	0.76	0.84	0.79	0.76	0.82	0.78	0.75	0.81	0.77	0.75	0.79	0.76	0.74	0.73
6	0.81	0.76	0.72	0.80	0.75	0.72	0.79	0.75	0.72	0.77	0.74	0.71	0.76	0.73	0.71	0.70
7	0.77	0.72	0.69	0.76	0.72	0.69	0.75	0.71	0.68	0.74	0.71	0.68	0.73	0.70	0.68	0.67
8	0.74	0.69	0.66	0.73	0.69	0.66	0.72	0.68	0.65	0.71	0.68	0.65	0.71	0.67	0.65	0.64
9	0.71	0.66	0.63	0.70	0.66	0.63	0.69	0.65	0.63	0.69	0.65	0.62	0.68	0.65	0.62	0.61
10	0.68	0.63	0.60	0.68	0.63	0.60	0.67	0.63	0.60	0.66	0.62	0.60	0.66	0.62	0.60	0.59

Coefficient Utilization Curve



Equipment: GMS1980	Date: 2023/8/29	Operator: NT07
Temperature(°C): 25.0	Humidity(%): 60.0%	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	3273.00	3261.93	3253.08	3218.76	3180.01	3119.12	3069.30	3025.02	2951.40
45.0	3268.02	3280.20	3287.39	3296.81	3285.18	3251.42	3213.77	3171.15	3111.37
90.0	3286.84	3297.36	3295.70	3277.43	3240.90	3201.60	3152.33	3106.39	3051.04
135.0	3266.91	3265.25	3263.59	3240.90	3215.44	3173.92	3123.55	3067.64	3019.48
180.0	3273.00	3258.61	3235.36	3211.56	3171.71	3116.35	3074.84	3030.00	2980.74
225.0	3268.02	3225.95	3186.10	3138.49	3083.14	3020.04	2962.47	2889.40	2831.28
270.0	3286.84	3278.54	3253.63	3211.01	3162.85	3102.51	3052.70	2990.70	2902.69
315.0	3270.24	3265.25	3249.20	3202.70	3161.19	3109.16	3031.11	2972.99	2916.53
360.0	3273.00	3261.93	3253.08	3218.76	3180.01	3119.12	3069.30	3025.02	2951.40

C/γ(°)	9.0	10.0	11.0	12.0	13.0	14.0	15.0	16.0	17.0
0.0	2875.01	2794.75	2710.06	2611.53	2474.25	2350.81	2229.59	2048.03	1917.95
45.0	3057.68	2976.86	2898.26	2818.00	2685.15	2577.76	2449.34	2308.74	2136.59
90.0	2982.95	2901.03	2810.25	2676.29	2560.05	2444.36	2262.80	2108.36	1962.23
135.0	2959.15	2891.06	2798.62	2720.02	2628.13	2496.39	2373.51	2247.85	2071.83
180.0	2911.54	2845.12	2785.34	2701.75	2619.83	2537.35	2421.66	2318.71	2201.36
225.0	2772.61	2691.79	2623.71	2544.55	2438.27	2343.62	2237.89	2119.43	1956.69
270.0	2851.76	2795.85	2728.32	2623.71	2531.82	2450.45	2349.70	2217.41	2106.15
315.0	2855.08	2769.84	2691.24	2608.76	2515.21	2399.52	2293.24	2161.50	2005.41
360.0	2875.01	2794.75	2710.06	2611.53	2474.25	2350.81	2229.59	2048.03	1917.95

C/γ(°)	18.0	19.0	20.0	21.0	22.0	23.0	24.0	25.0	26.0
0.0	1785.65	1626.79	1497.81	1365.52	1083.77	1083.77	974.56	851.12	752.98
45.0	1991.01	1849.31	1710.37	1533.79	1398.18	1264.22	1111.44	999.08	875.64
90.0	1822.74	1644.50	1503.35	1361.64	1085.32	1085.32	981.70	890.58	794.82
135.0	1926.80	1791.74	1613.50	1472.35	1335.63	1207.76	1064.39	960.88	860.14
180.0	2036.96	1901.34	1751.33	1610.18	1443.01	1291.90	1157.39	1045.57	918.81
225.0	1831.04	1692.66	1560.36	1395.96	1085.82	1085.82	1029.08	899.88	802.79
270.0	1993.23	1850.42	1725.32	1609.07	1464.60	1342.27	1181.19	1078.79	966.42
315.0	1886.95	1729.19	1612.40	1496.71	1372.71	1079.78	1079.78	1003.23	908.02
360.0	1785.65	1626.79	1497.81	1365.52	1083.77	1083.77	974.56	851.12	752.98

C/γ(°)	27.0	28.0	29.0	30.0	31.0	32.0	33.0	34.0	35.0
0.0	653.67	561.29	452.68	375.80	307.66	245.05	186.65	127.70	95.32
45.0	779.32	681.90	568.43	485.95	409.01	335.94	284.46	284.46	141.59
90.0	671.77	582.21	473.72	397.33	327.31	245.99	185.71	135.67	92.22
135.0	763.82	639.28	549.05	462.70	369.71	303.28	288.34	214.22	123.33
180.0	816.96	721.76	599.98	511.41	412.33	342.58	294.43	294.43	149.01
225.0	672.32	576.56	488.44	388.91	316.35	253.57	198.17	139.16	102.57
270.0	870.66	736.70	627.10	530.79	444.43	342.03	286.12	286.12	158.48
315.0	777.33	672.88	578.06	486.17	377.12	301.68	234.98	168.99	124.93
360.0	653.67	561.29	452.68	375.80	307.66	245.05	186.65	127.70	95.32

C/γ(°)	36.0	37.0	38.0	39.0	40.0	41.0	42.0	43.0	44.0
0.0	73.12	62.94	54.74	47.05	42.35	38.03	33.65	30.56	27.73
45.0	104.29	80.43	65.65	57.29	49.21	44.12	39.69	34.93	31.61
90.0	74.28	64.27	55.96	48.27	43.45	38.97	35.04	30.83	27.95
135.0	91.89	70.08	59.73	52.14	46.33	40.30	36.15	32.44	29.23
180.0	109.05	82.09	66.09	54.69	47.77	42.18	37.64	32.66	29.34
225.0	78.71	64.32	53.42	46.44	41.07	35.70	31.94	28.78	25.35
270.0	106.39	81.76	65.93	56.79	49.26	42.07	37.42	33.43	30.00
315.0	92.88	71.18	61.77	53.86	46.16	41.35	36.98	33.16	29.23
360.0	73.12	62.94	54.74	47.05	42.35	38.03	33.65	30.56	27.73

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	25.52	23.30	21.75	20.54	19.43	18.21	17.44	16.55	15.89
45.0	28.78	26.02	24.13	22.58	21.20	19.71	18.71	17.77	17.05
90.0	25.74	23.36	21.92	20.37	19.21	18.21	17.38	16.50	15.83
135.0	26.13	24.08	22.36	20.65	19.48	18.21	17.33	16.61	15.78
180.0	25.91	23.75	21.98	20.15	19.04	18.05	16.94	16.22	15.55
225.0	23.19	21.48	19.65	18.60	17.66	16.83	15.94	15.28	14.72
270.0	26.35	23.97	22.25	20.65	19.21	18.27	17.27	16.27	15.61
315.0	26.51	24.47	22.69	20.87	19.71	18.43	17.55	16.77	15.94
360.0	25.52	23.30	21.75	20.54	19.43	18.21	17.44	16.55	15.89

C/γ(°)	54.0	55.0	56.0	57.0	58.0	59.0	60.0	61.0	62.0
0.0	15.28	14.61	14.12	13.67	13.23	12.84	12.51	12.18	11.90
45.0	16.16	15.55	15.00	14.39	13.89	13.51	13.01	12.62	12.29
90.0	15.22	14.61	14.06	13.56	13.23	12.79	12.40	12.07	11.79
135.0	15.22	14.61	14.17	13.62	13.23	12.84	12.57	12.12	11.85
180.0	15.00	14.34	13.84	13.45	13.12	12.68	12.40	12.12	11.73
225.0	14.28	13.67	13.34	12.84	12.51	12.23	11.85	11.57	11.35
270.0	15.06	14.39	13.95	13.40	13.01	12.68	12.40	12.12	11.73
315.0	15.39	14.78	14.17	13.73	13.40	13.01	12.57	12.23	11.90
360.0	15.28	14.61	14.12	13.67	13.23	12.84	12.51	12.18	11.90

C/γ(°)	63.0	64.0	65.0	66.0	67.0	68.0	69.0	70.0	71.0
0.0	11.57	11.35	11.07	10.79	10.52	10.35	10.02	9.80	9.58
45.0	11.96	11.68	11.40	11.13	10.85	10.63	10.35	10.13	9.85
90.0	11.46	11.24	10.96	10.68	10.41	10.19	9.91	9.74	9.52
135.0	11.62	11.24	11.07	10.79	10.52	10.30	10.07	9.80	9.63
180.0	11.51	11.18	10.96	10.74	10.52	10.24	10.02	9.85	9.63
225.0	11.07	10.85	10.68	10.46	10.19	9.96	9.80	9.58	9.35
270.0	11.46	11.18	10.96	10.74	10.52	10.30	10.02	9.85	9.63
315.0	11.68	11.35	11.13	10.90	10.63	10.41	10.13	9.96	9.74
360.0	11.57	11.35	11.07	10.79	10.52	10.35	10.02	9.80	9.58

C/γ(°)	72.0	73.0	74.0	75.0	76.0	77.0	78.0	79.0	80.0
0.0	9.35	9.19	9.02	8.80	8.64	8.47	8.30	8.03	7.86
45.0	9.63	9.47	9.24	9.08	8.80	8.69	8.52	8.30	8.14
90.0	9.35	9.08	8.91	8.75	8.58	8.41	8.19	8.03	7.80
135.0	9.41	9.24	9.02	8.86	8.64	8.52	8.30	8.14	7.92
180.0	9.41	9.24	9.08	8.91	8.69	8.52	8.30	8.14	7.97
225.0	9.19	9.02	8.86	8.64	8.47	8.36	8.14	7.97	7.75
270.0	9.47	9.24	9.08	8.91	8.75	8.58	8.36	8.25	8.08
315.0	9.52	9.30	9.19	8.97	8.80	8.58	8.41	8.30	8.03
360.0	9.35	9.19	9.02	8.80	8.64	8.47	8.30	8.03	7.86

C/γ(°)	81.0	82.0	83.0	84.0	85.0	86.0	87.0	88.0	89.0
0.0	7.69	7.58	7.42	7.25	7.14	6.97	6.86	6.92	6.59
45.0	7.92	7.69	7.53	7.36	7.20	7.03	6.92	6.81	6.75
90.0	7.64	7.53	7.36	7.20	7.09	6.97	6.81	6.70	6.59
135.0	7.75	7.58	7.42	7.25	7.14	6.97	6.86	6.75	6.59
180.0	7.75	7.64	7.53	7.31	7.14	7.03	6.92	6.86	6.81
225.0	7.64	7.53	7.36	7.20	7.09	6.97	6.81	6.75	6.59
270.0	7.92	7.75	7.58	7.36	7.25	7.09	6.97	6.86	6.86
315.0	7.92	7.69	7.53	7.36	7.25	7.09	6.97	6.81	6.81
360.0	7.69	7.58	7.42	7.25	7.14	6.97	6.86	6.92	6.59

Intensity data(cd)

C/γ(°)	90.0
0.0	6.64
45.0	6.59
90.0	6.59
135.0	6.64
180.0	6.59
225.0	6.64
270.0	6.59
315.0	6.59
360.0	6.64