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NATA

Client:
LumCAT: 1-1378-L Luminaire:
92.70.410.00 Report No: 2023829-B016
Ballast type: AC
Test No: 2023829-C016
LampCAT: LUXEON CoB 1203 LES9
Lamp flux(lm): 1615.6 Number of
Lamps: 1 Length(mm): 0
Phm Type: C

Voltage(V): 35.800
Current(A): 0.378
Power (W): 13.534
PF: 0.000
Width(mm): 0
Height(mm): 0

Photometric Results

Lumens(lm): 1469.36, Efficiency(%): 90.95% , Luminous Efficacy(lm/W): 108.57
Central intensity(cd): 5266.286, Maximum intensity(cd): 5266.286
Angle of maximum intensity: C=0.0 γ=0.0
Beam Angle(50%Imax): [C0/180]Total=25.8
[C90/270]Total=25.8
Field angle(10%Imax): [C0/180]Total=54.6
[C90/270]Total=54.6
Maximum s/h(1/2): C0_180=0.43 C90_270=0.43
Maximum s/h(1/4): C0_180=0.45 C90_270=0.45
Up flux rate of lamp(%): 0.00%
Down flux rate of lamp(%): 90.95%
Up flux rate of LUM(%): - -
Down flux rate of LUM(%): 100.00%
CIE Type : Direct lighting
Output flux ratio in π solid angle : 97.991%

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	5266.286	0.000	0	0.00%	0.00%
1.0	5242.761	5.028	5.028	0.31%	0.34%
2.0	5180.073	14.960	19.988	0.93%	1.36%
3.0	5071.718	24.519	44.507	1.52%	3.03%
4.0	4919.703	33.444	77.952	2.07%	5.31%
5.0	4734.200	41.531	119.482	2.57%	8.13%
6.0	4502.337	48.540	168.023	3.00%	11.44%
7.0	4258.712	54.380	222.402	3.37%	15.14%
8.0	3988.863	59.026	281.429	3.65%	19.15%
9.0	3723.581	62.505	343.934	3.87%	23.41%
10.0	3438.095	64.811	408.744	4.01%	27.82%
11.0	3149.426	65.823	474.567	4.07%	32.30%
12.0	2865.739	65.754	540.322	4.07%	36.77%
13.0	2593.122	64.783	605.105	4.01%	41.18%
14.0	2319.883	62.886	667.991	3.89%	45.46%
15.0	2086.083	60.487	728.478	3.74%	49.58%
16.0	1853.460	57.725	786.203	3.57%	53.51%
17.0	1668.856	54.852	841.055	3.40%	57.24%
18.0	1446.286	51.362	892.417	3.18%	60.74%
19.0	1297.696	47.740	940.156	2.95%	63.98%
20.0	1170.127	45.168	985.324	2.80%	67.06%
21.0	1072.940	43.071	1028.396	2.67%	69.99%
22.0	979.025	41.235	1069.631	2.55%	72.80%
23.0	888.280	39.181	1108.812	2.43%	75.46%
24.0	802.115	36.958	1145.77	2.29%	77.98%
25.0	717.016	34.542	1180.312	2.14%	80.33%
26.0	635.196	31.919	1212.231	1.98%	82.50%
27.0	550.872	29.017	1241.248	1.80%	84.48%
28.0	468.679	25.813	1267.061	1.60%	86.23%
29.0	394.581	22.585	1289.647	1.40%	87.77%
30.0	321.681	19.339	1308.986	1.20%	89.09%
31.0	267.503	16.396	1325.382	1.01%	90.20%
32.0	229.365	14.235	1339.616	0.88%	91.17%
33.0	176.447	11.955	1351.572	0.74%	91.98%
34.0	130.496	9.289	1360.861	0.57%	92.62%
35.0	102.632	7.240	1368.101	0.45%	93.11%
36.0	89.050	6.103	1374.204	0.38%	93.52%
37.0	79.294	5.490	1379.695	0.34%	93.90%

Zonal flux distribution table

γ(°)	Average I(cd)	Zonal F(lm)	Sum F(lm)	Eff Flux(%)	Eff Sum(%)
38.0	71.724	5.041	1384.735	0.31%	94.24%
39.0	64.563	4.652	1389.387	0.29%	94.56%
40.0	58.398	4.288	1393.676	0.27%	94.85%
41.0	53.098	3.970	1397.646	0.25%	95.12%
42.0	48.379	3.687	1401.333	0.23%	95.37%
43.0	44.200	3.429	1404.762	0.21%	95.60%
44.0	40.470	3.196	1407.958	0.20%	95.82%
45.0	37.018	2.978	1410.936	0.18%	96.02%
46.0	34.001	2.777	1413.713	0.17%	96.21%
47.0	31.330	2.598	1416.312	0.16%	96.39%
48.0	28.867	2.433	1418.745	0.15%	96.56%
49.0	26.777	2.285	1421.03	0.14%	96.71%
50.0	24.833	2.152	1423.182	0.13%	96.86%
51.0	23.096	2.028	1425.21	0.13%	97.00%
52.0	21.595	1.918	1427.127	0.12%	97.13%
53.0	20.273	1.821	1428.949	0.11%	97.25%
54.0	19.118	1.736	1430.685	0.11%	97.37%
55.0	18.108	1.662	1432.347	0.10%	97.48%
56.0	17.229	1.597	1433.943	0.10%	97.59%
57.0	16.482	1.541	1435.485	0.10%	97.69%
58.0	15.824	1.494	1436.979	0.09%	97.80%
59.0	15.229	1.452	1438.43	0.09%	97.90%
60.0	14.669	1.412	1439.843	0.09%	97.99%
61.0	14.198	1.378	1441.22	0.09%	98.09%
62.0	13.714	1.345	1442.565	0.08%	98.18%
63.0	13.271	1.312	1443.878	0.08%	98.27%
64.0	12.842	1.281	1445.159	0.08%	98.35%
65.0	12.434	1.251	1446.41	0.08%	98.44%
66.0	12.039	1.221	1447.631	0.08%	98.52%
67.0	11.631	1.190	1448.821	0.07%	98.60%
68.0	11.244	1.159	1449.98	0.07%	98.68%
69.0	10.905	1.130	1451.11	0.07%	98.76%
70.0	10.545	1.102	1452.212	0.07%	98.83%
71.0	10.227	1.074	1453.285	0.07%	98.91%
72.0	9.908	1.047	1454.332	0.06%	98.98%
73.0	9.583	1.019	1455.351	0.06%	99.05%
74.0	9.279	0.992	1456.343	0.06%	99.11%
75.0	9.009	0.966	1457.309	0.06%	99.18%

Zonal flux distribution table

γ(°)	Average I(cd)	Zonal F(lm)	Sum F(lm)	Eff Flux(%)	Eff Sum(%)
76.0	8.732	0.942	1458.251	0.06%	99.24%
77.0	8.476	0.917	1459.168	0.06%	99.31%
78.0	8.220	0.894	1460.062	0.06%	99.37%
79.0	7.999	0.871	1460.934	0.05%	99.43%
80.0	7.791	0.851	1461.785	0.05%	99.48%
81.0	7.590	0.832	1462.617	0.05%	99.54%
82.0	7.417	0.814	1463.431	0.05%	99.60%
83.0	7.251	0.797	1464.228	0.05%	99.65%
84.0	7.085	0.781	1465.009	0.05%	99.70%
85.0	6.919	0.764	1465.773	0.05%	99.76%
86.0	6.753	0.747	1466.521	0.05%	99.81%
87.0	6.601	0.731	1467.251	0.05%	99.86%
88.0	6.449	0.715	1467.966	0.04%	99.91%
89.0	6.338	0.701	1468.667	0.04%	99.95%
90.0	6.248	0.690	1469.357	0.04%	100.00%

Zonal flux distribution table

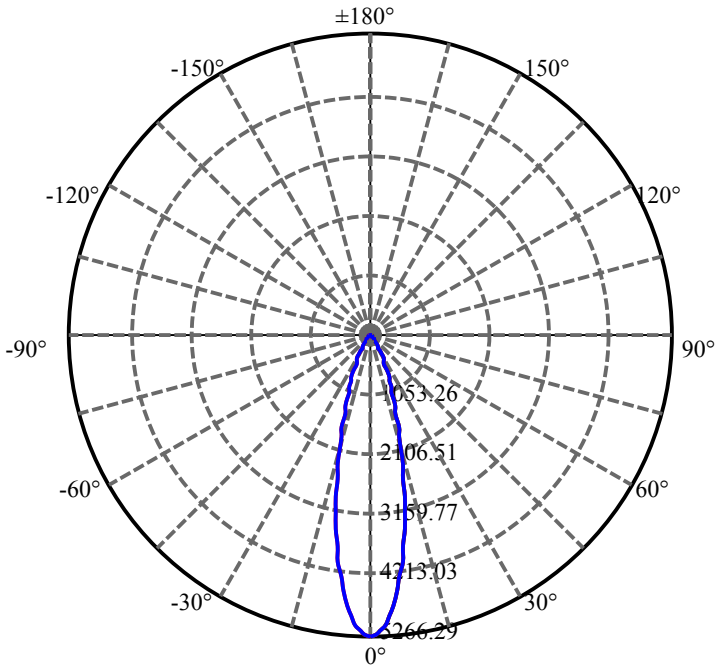
ZONAL LUMEN SUMMARY

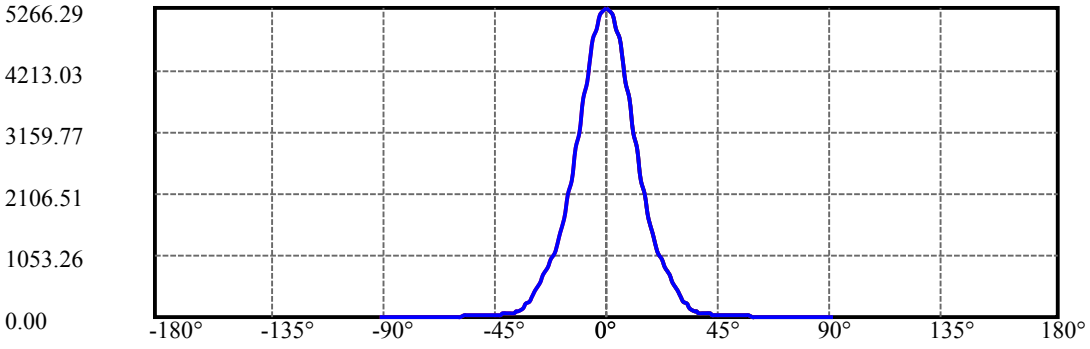
Zone	Lumens	%Lamp	%Fixt
0-30	1308.99	81.02%	89.09%
0-40	1393.68	86.26%	94.85%
0-60	1439.84	89.12%	97.99%
0-90	1468.67	90.91%	99.95%
0-120	1468.67	90.91%	99.95%
0-180	1469.36	90.95%	100.00%
60-90	28.82	1.78%	1.96%
90-120	0.00	0.00%	0.00%
90-130	0.00	0.00%	0.00%
90-150	0.00	0.00%	0.00%
90-180	0.00	0.00%	0.00%
0-24.86	1175.49	72.76%	80.00%

ZONAL LUMEN SUMMARY

0-10	408.74
10-20	576.58
20-30	323.66
30-40	84.69
40-50	29.51
50-60	16.66
60-70	12.37
70-80	9.57
80-90	6.88
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:

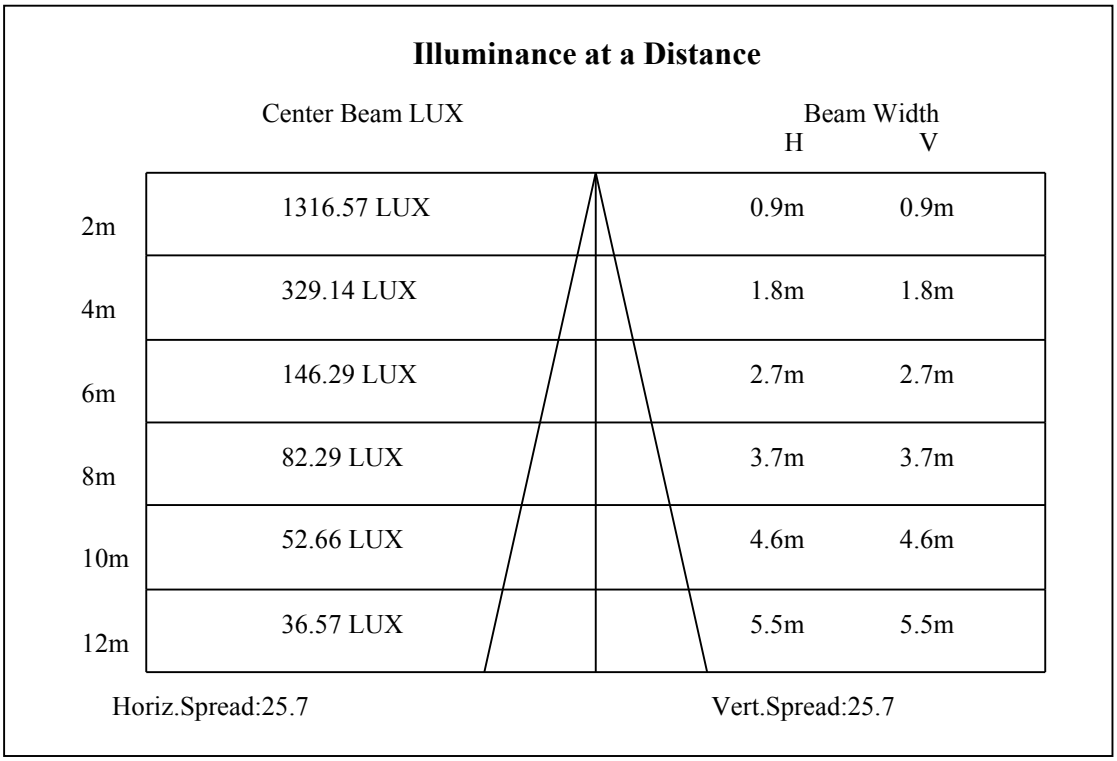
C90/C270:

Field angle(10%Imax):C0/180Left:27.3 Right:27.3
:C90/270Left:27.3 Right:27.3

Beam Angle(50%Imax):C0/180Left:12.9 Right:12.9
:C90/270Left:12.9 Right:12.9

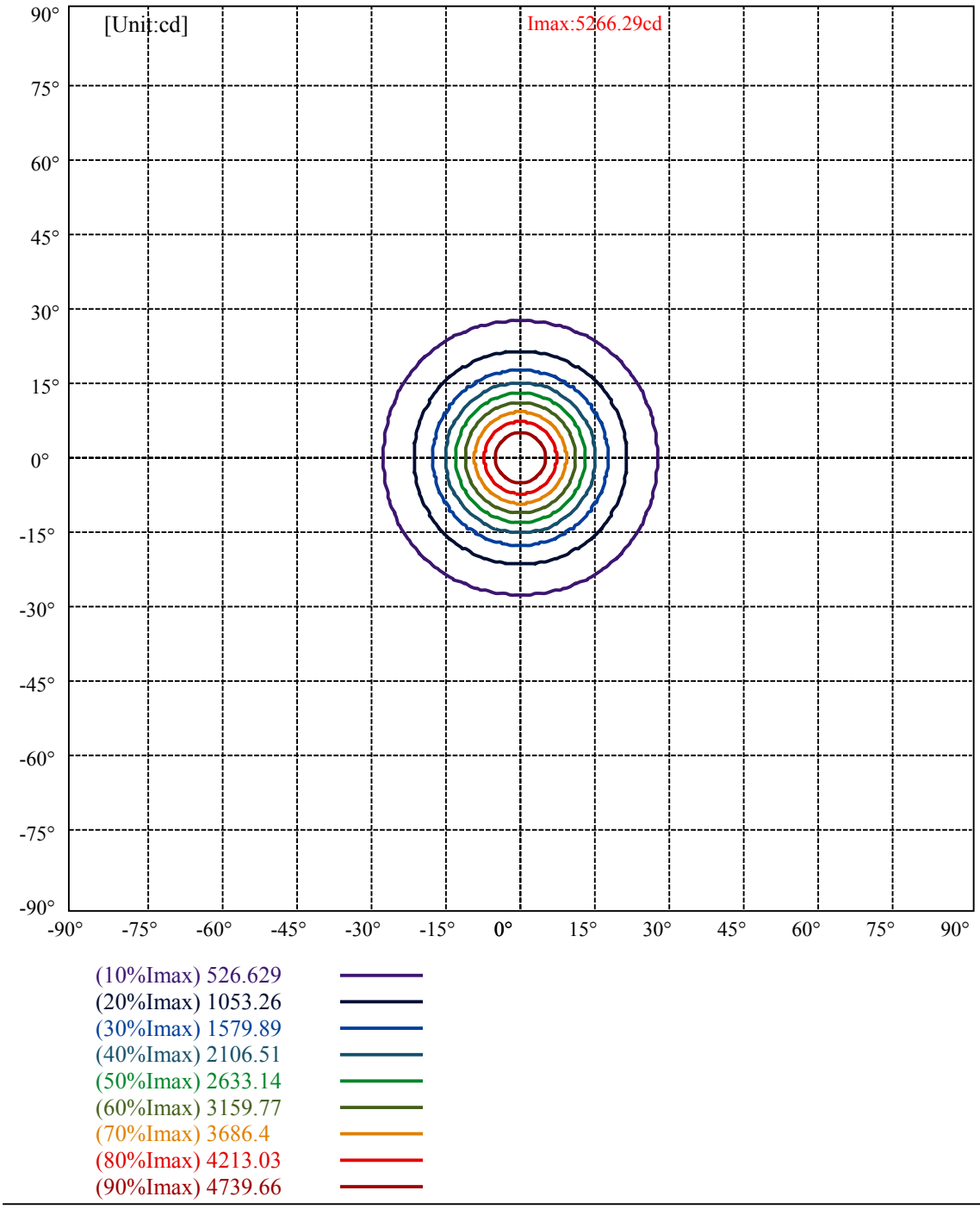
Equipment: GMS1980	Date: 2023/8/29	Operator: NT07
Temperature(°C): 25.0	Humidity(%): 60.0%	Distance(m): 7.44

Lux distance Curve



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

ISO-Intensity(V-H)

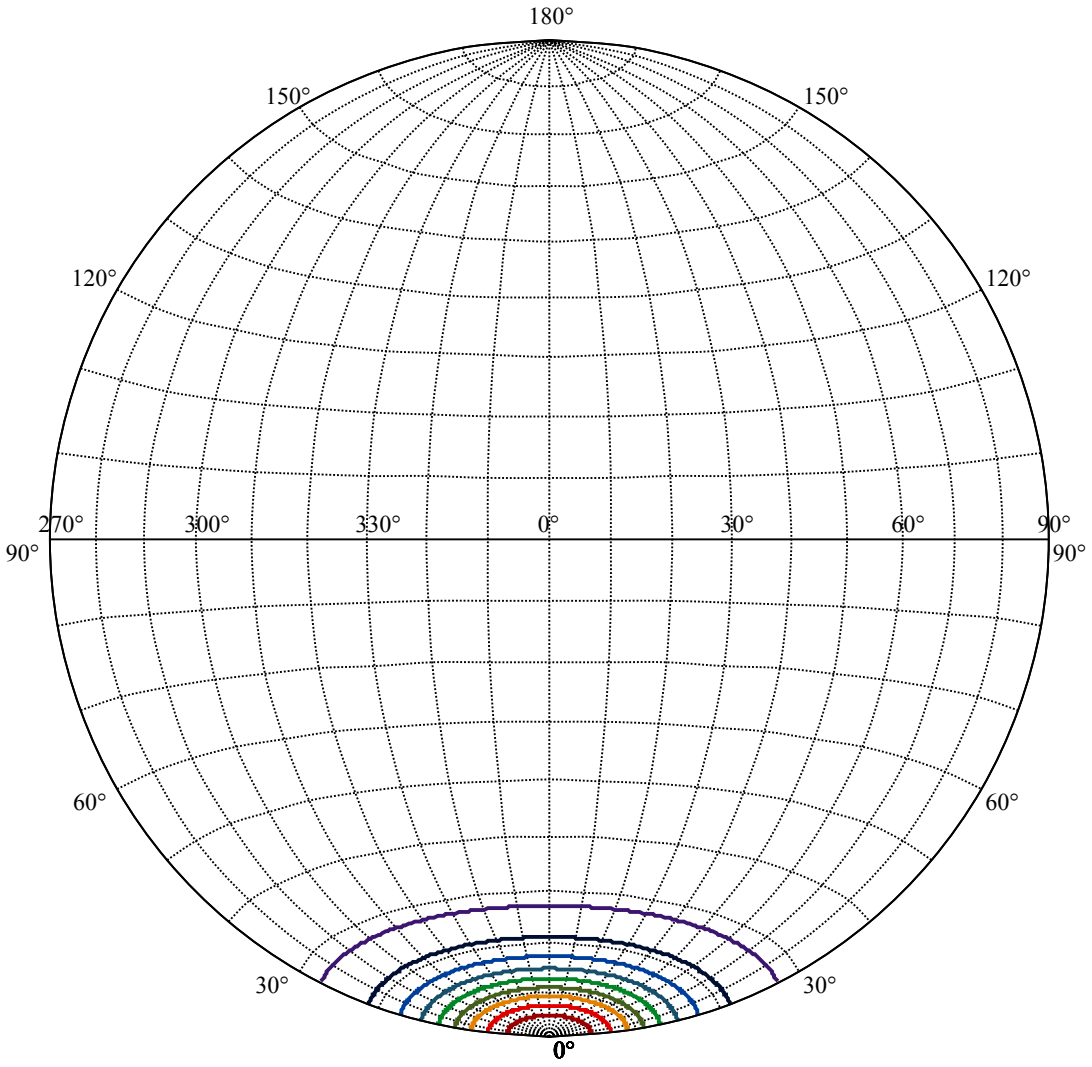


Equipment: GMS1980
Temperature(°C): 25.0

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

Operator: NT07
Distance(m): 7.44

ISO candela diagram on circular web



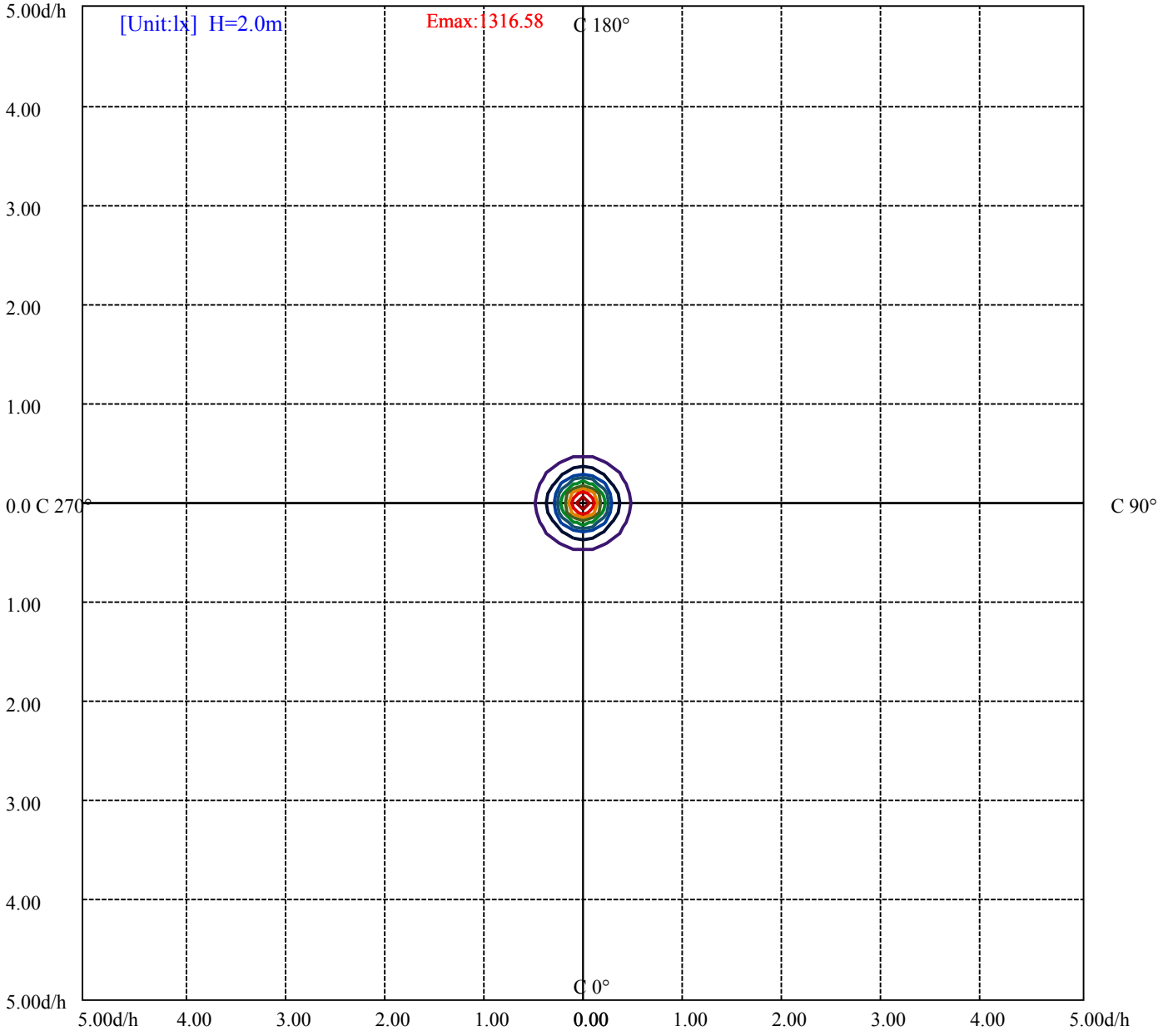
House [Unit:cd] Road

Imax:5266.29

(10%Imax) 526.629
(20%Imax) 1053.26
(30%Imax) 1579.89
(40%Imax) 2106.51
(50%Imax) 2633.14
(60%Imax) 3159.77
(70%Imax) 3686.4
(80%Imax) 4213.03
(90%Imax) 4739.66

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

ISO illuminance diagram

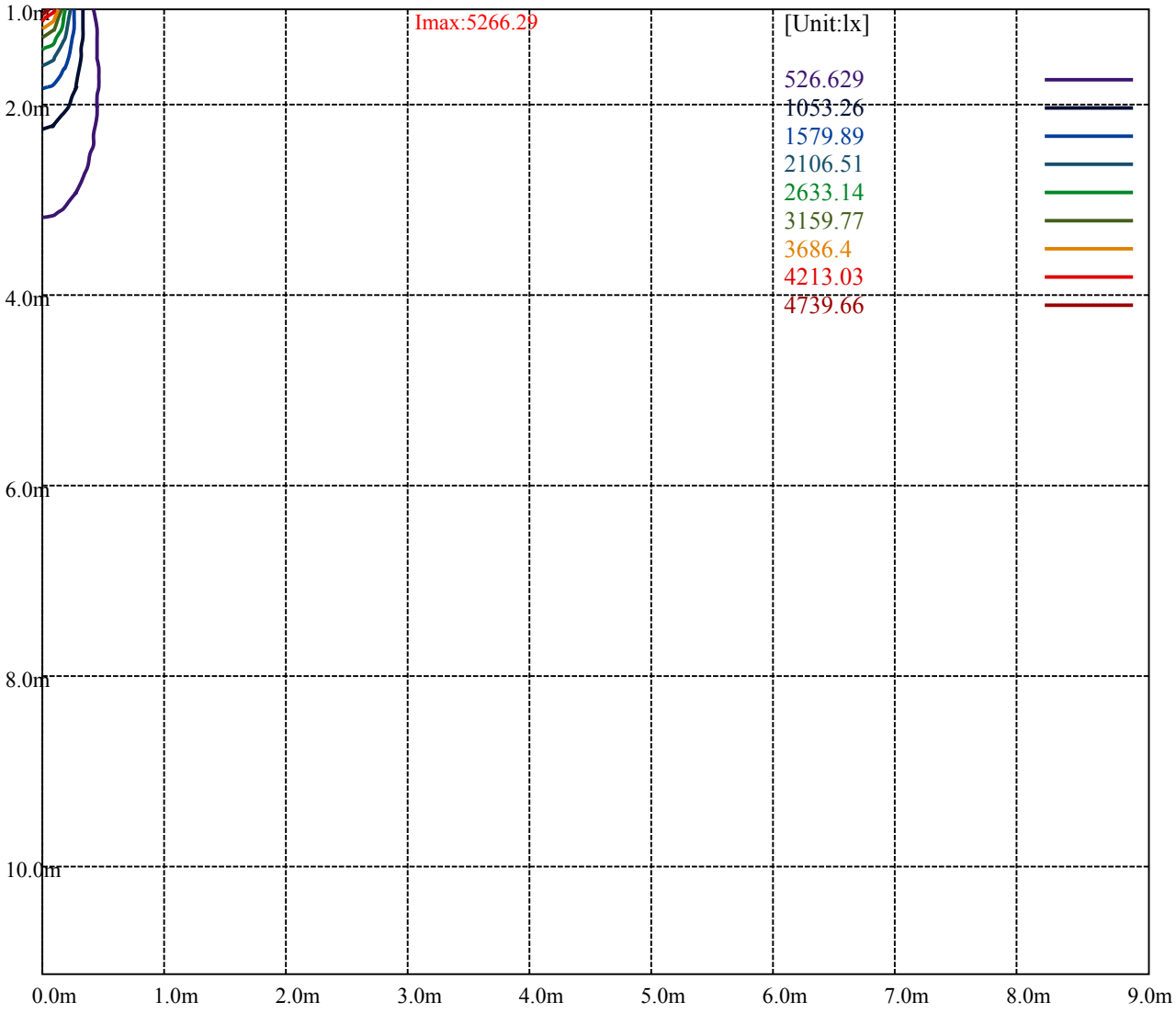


Equipment: GMS1980
Temperature(°C): 25.0

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

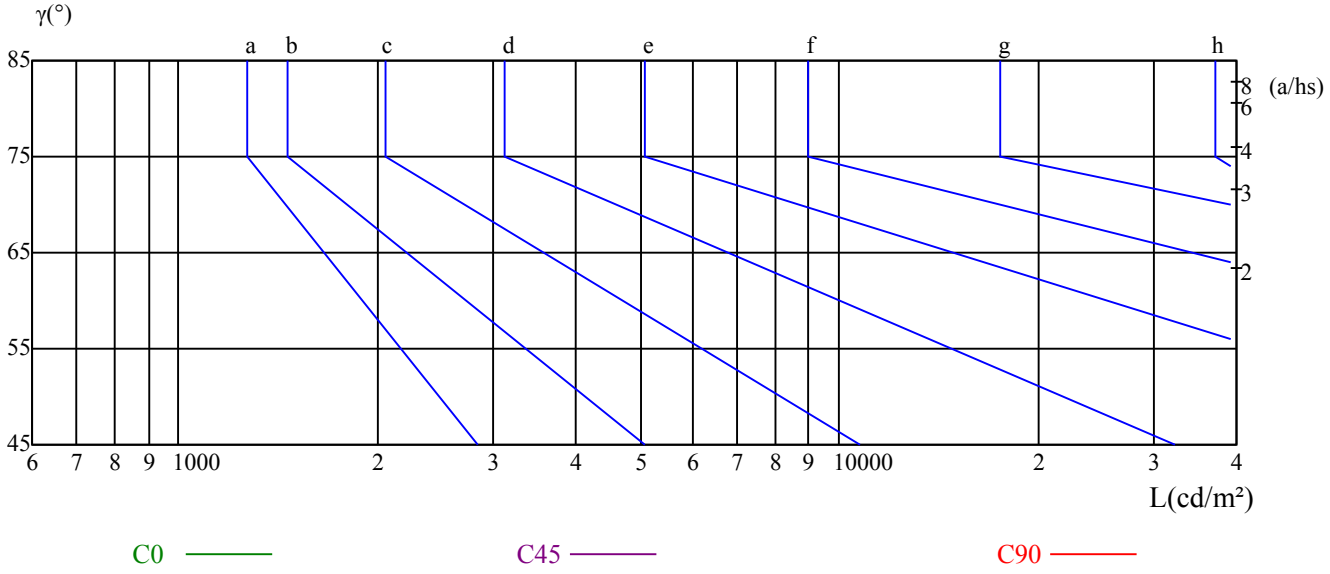
γ	45	50	55	60	65	70	75	80	85
C0	0	0	0	0	0	0	0	0	0
C45	0	0	0	0	0	0	0	0	0
C90	0	0	0	0	0	0	0	0	0

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



Equipment: GMS1980
Temperature(°C): 25.0

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

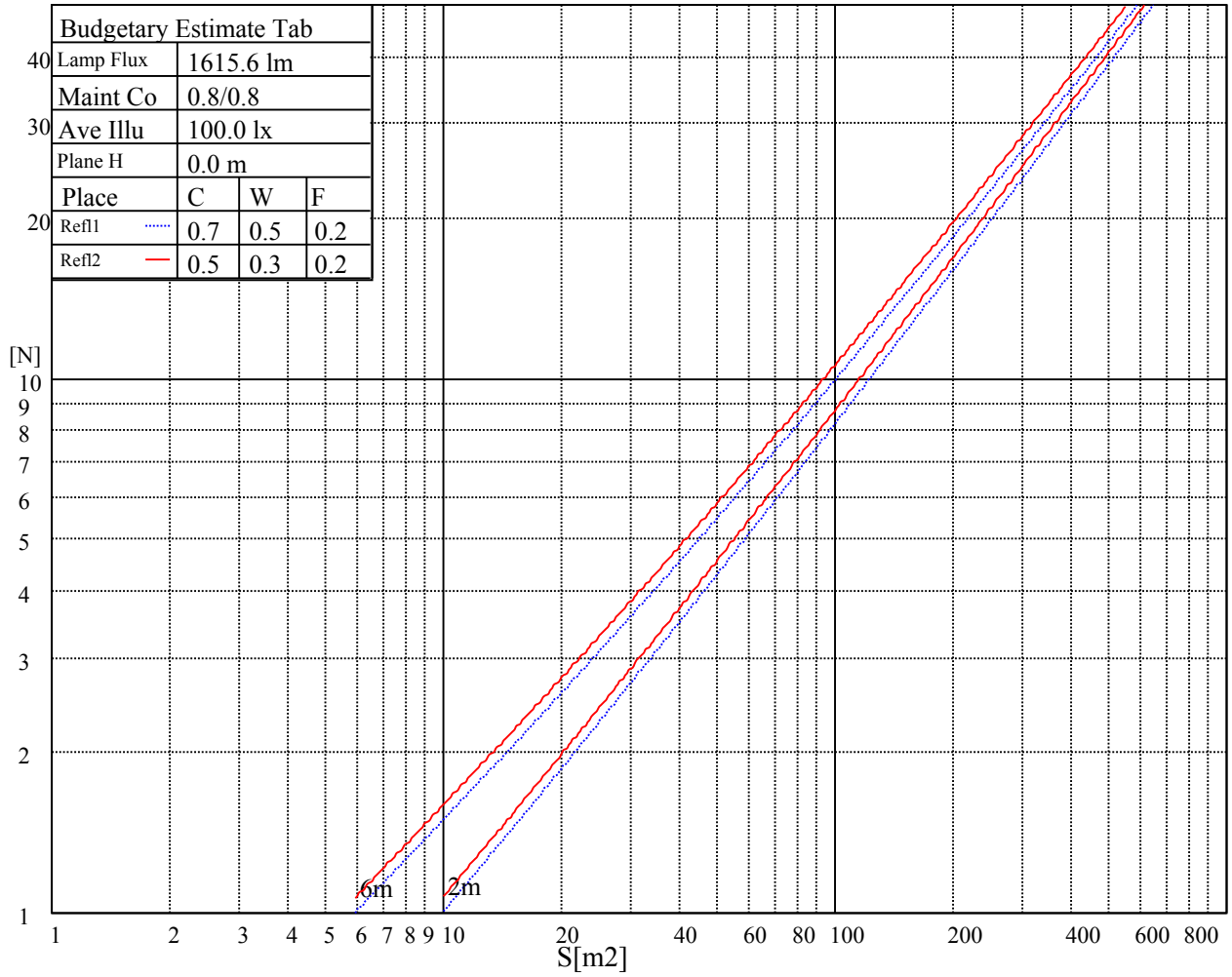
Operator: NT07
Distance(m): 7.44

UGR Glare

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

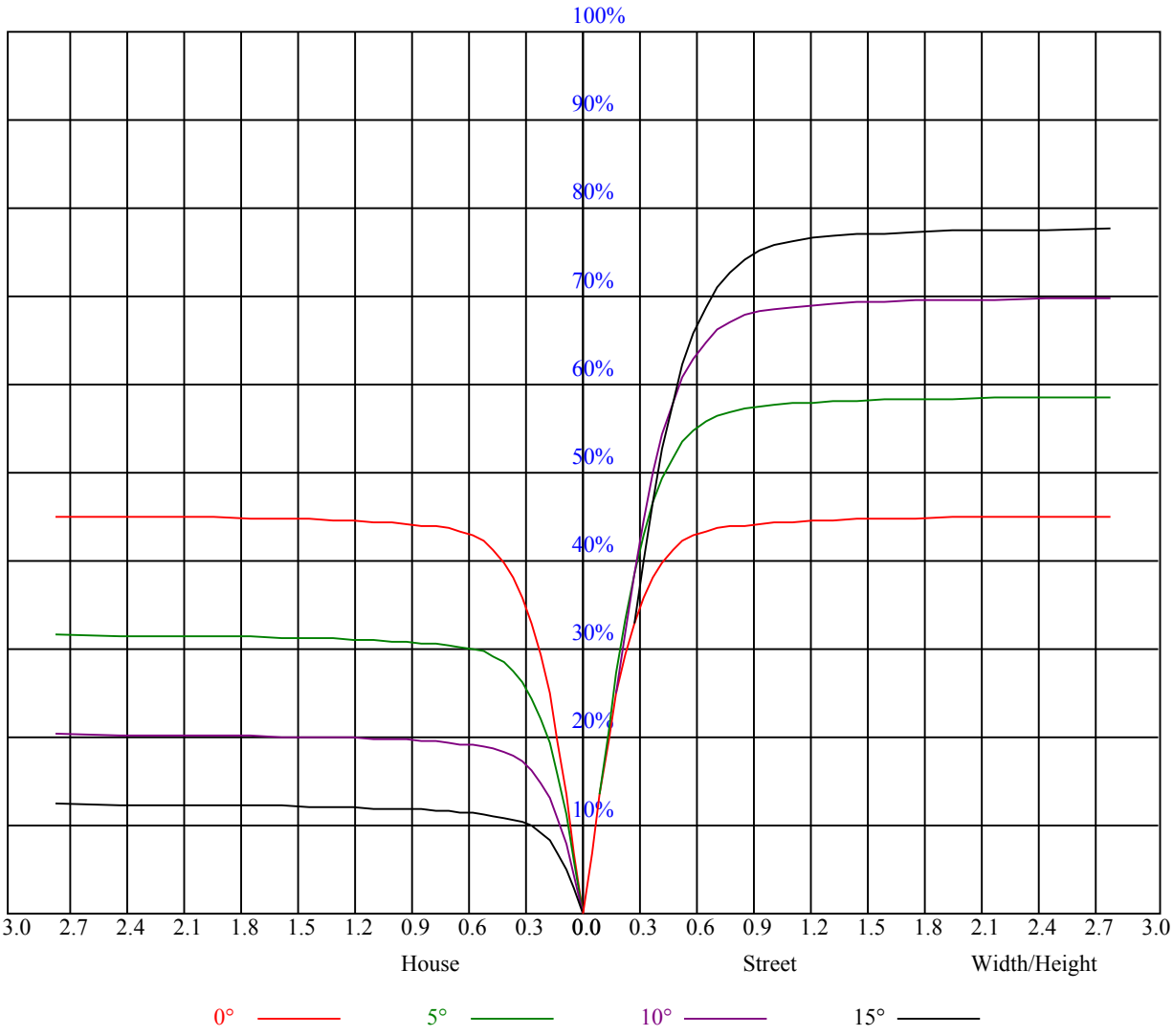


Equipment: GMS1980 Date: 2023/8/29 Operator: NT07
Temperature(°C): 25.0 Humidity(%): 60.0% Distance(m): 7.44

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	1.08	1.08	1.08	1.06	1.06	1.06	1.01	1.01	1.01	0.97	0.97	0.97	0.93	0.93	0.93	0.91
1	1.02	1.00	0.98	1.00	0.98	0.96	0.96	0.95	0.93	0.93	0.92	0.91	0.90	0.89	0.88	0.86
2	0.96	0.93	0.90	0.94	0.92	0.89	0.92	0.89	0.87	0.89	0.87	0.85	0.86	0.85	0.84	0.82
3	0.91	0.87	0.84	0.90	0.86	0.84	0.88	0.85	0.82	0.85	0.83	0.81	0.84	0.82	0.80	0.79
4	0.87	0.83	0.80	0.86	0.82	0.79	0.84	0.81	0.78	0.82	0.80	0.77	0.81	0.78	0.76	0.75
5	0.83	0.79	0.76	0.82	0.78	0.75	0.81	0.77	0.75	0.79	0.76	0.74	0.78	0.75	0.73	0.72
6	0.80	0.75	0.72	0.79	0.75	0.72	0.78	0.74	0.71	0.76	0.73	0.71	0.75	0.73	0.71	0.69
7	0.76	0.72	0.69	0.76	0.72	0.69	0.75	0.71	0.69	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	0.69	0.66	0.71	0.68	0.66	0.71	0.68	0.65	0.64
9	0.71	0.67	0.64	0.71	0.67	0.64	0.70	0.66	0.64	0.69	0.66	0.63	0.68	0.65	0.63	0.62
10	0.69	0.64	0.62	0.68	0.64	0.62	0.68	0.64	0.61	0.67	0.64	0.61	0.66	0.63	0.61	0.60

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	5229.75	5137.87	5023.28	4817.37	4612.56	4394.47	4096.11	3838.72	3501.61
45.0	5289.53	5245.81	5158.90	5041.55	4836.74	4633.59	4409.97	4107.18	3852.56
90.0	5250.79	5141.74	5013.32	4862.20	4661.82	4439.86	4138.18	3890.20	3624.50
135.0	5295.07	5277.91	5211.49	5084.17	4939.70	4745.96	4545.03	4253.87	4008.10
180.0	5229.75	5290.64	5281.79	5243.04	5162.22	5023.28	4872.72	4674.00	4457.02
225.0	5289.53	5288.43	5242.48	5160.56	5036.02	4873.28	4633.04	4411.63	4113.27
270.0	5250.79	5288.98	5295.07	5248.57	5168.86	4998.37	4828.44	4632.49	4342.99
315.0	5295.07	5270.71	5214.25	5116.28	4939.70	4764.78	4495.21	4261.62	4010.87
360.0	5229.75	5137.87	5023.28	4817.37	4612.56	4394.47	4096.11	3838.72	3501.61

C/γ(°)	9.0	10.0	11.0	12.0	13.0	14.0	15.0	16.0	17.0
0.0	3239.24	2970.22	2702.86	2446.02	2151.54	1934.55	1737.49	1521.62	1376.59
45.0	3594.05	3271.90	3005.65	2674.08	2422.22	2182.54	1957.25	1710.37	1538.77
90.0	3361.57	3031.66	2768.18	2506.36	2200.80	1980.50	1734.73	1563.13	1408.69
135.0	3751.81	3491.10	3167.83	2900.47	2630.90	2326.46	2099.51	1830.49	1650.59
180.0	4158.11	3907.36	3584.09	3310.64	3044.39	2718.91	2468.72	2226.82	2002.08
225.0	3853.66	3590.18	3253.63	2981.84	2727.22	2419.45	2177.00	1967.21	1767.94
270.0	4091.13	3848.13	3584.09	3245.33	2966.34	2702.86	2449.34	2151.54	1936.21
315.0	3739.08	3394.23	3129.08	2861.17	2601.56	2293.80	2064.63	1856.50	1669.96
360.0	3239.24	2970.22	2702.86	2446.02	2151.54	1934.55	1737.49	1521.62	1376.59

C/γ(°)	18.0	19.0	20.0	21.0	22.0	23.0	24.0	25.0	26.0
0.0	1078.40	1078.40	1008.82	923.74	827.15	747.88	666.79	568.76	493.09
45.0	1390.43	1260.35	1143.00	1022.88	938.74	843.53	768.25	692.42	594.44
90.0	1103.14	1103.14	1031.90	947.38	873.15	782.92	704.37	629.04	554.03
135.0	1486.74	1345.04	1221.60	1086.54	996.86	916.60	823.61	741.68	664.19
180.0	1760.19	1576.97	1409.80	1273.08	1130.82	1031.74	937.63	847.41	768.81
225.0	1548.74	1390.43	1080.28	1080.28	1006.99	922.25	842.37	741.24	659.43
270.0	1743.58	1527.15	1365.52	1198.35	1094.84	995.76	887.26	811.43	720.65
315.0	1459.07	1100.10	1100.10	1051.28	963.65	865.56	786.63	704.15	626.93
360.0	1078.40	1078.40	1008.82	923.74	827.15	747.88	666.79	568.76	493.09

C/γ(°)	27.0	28.0	29.0	30.0	31.0	32.0	33.0	34.0	35.0
0.0	421.24	354.37	291.33	221.41	172.92	134.79	109.05	91.39	82.31
45.0	519.71	446.09	360.30	297.19	282.25	282.25	136.34	108.94	92.77
90.0	458.99	389.36	310.31	252.25	199.94	145.47	113.47	94.93	81.92
135.0	583.37	489.27	417.31	335.39	291.66	291.66	159.47	124.49	101.74
180.0	690.76	587.25	512.52	421.74	350.33	286.68	286.68	217.48	131.02
225.0	558.96	482.02	408.73	322.21	261.71	209.24	164.51	130.80	104.78
270.0	643.15	541.30	468.79	399.04	331.51	286.12	286.12	157.37	125.04
315.0	530.79	459.77	387.36	324.21	249.70	198.72	155.93	118.57	101.46
360.0	421.24	354.37	291.33	221.41	172.92	134.79	109.05	91.39	82.31

C/γ(°)	36.0	37.0	38.0	39.0	40.0	41.0	42.0	43.0	44.0
0.0	72.57	65.87	60.06	53.69	49.04	45.06	40.63	37.47	34.60
45.0	83.53	73.68	67.09	61.22	54.86	50.26	46.22	41.74	38.64
90.0	73.56	66.59	60.67	54.25	49.49	45.45	41.90	37.81	34.82
135.0	88.62	77.11	69.41	62.94	55.85	50.93	46.61	42.73	39.30
180.0	107.44	93.77	84.52	74.56	67.75	61.89	55.13	50.32	46.11
225.0	93.05	84.52	77.00	68.86	62.88	56.24	51.59	47.33	42.73
270.0	102.35	92.16	81.76	74.12	67.86	60.61	55.30	50.59	46.39
315.0	91.28	80.65	73.29	66.87	59.45	54.36	49.65	45.61	41.18
360.0	72.57	65.87	60.06	53.69	49.04	45.06	40.63	37.47	34.60

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	32.05	29.17	27.18	25.35	23.75	21.98	20.76	19.60	18.43
45.0	35.81	32.60	30.22	28.17	26.24	24.08	22.58	21.26	20.15
90.0	32.22	29.34	27.29	25.02	23.41	22.03	20.76	19.32	18.38
135.0	35.59	32.82	29.78	27.62	25.63	23.53	22.03	20.70	19.26
180.0	41.46	38.14	35.20	31.83	29.45	27.34	24.96	23.36	21.92
225.0	39.30	36.31	32.94	30.50	28.29	26.35	24.19	22.64	21.26
270.0	41.74	38.58	35.65	32.94	30.00	27.84	25.96	23.86	22.36
315.0	37.97	35.04	32.38	29.50	27.46	25.52	23.53	22.03	20.43
360.0	32.05	29.17	27.18	25.35	23.75	21.98	20.76	19.60	18.43

C/γ(°)	54.0	55.0	56.0	57.0	58.0	59.0	60.0	61.0	62.0
0.0	17.60	16.72	16.11	15.50	14.89	14.45	14.00	13.62	13.06
45.0	18.88	17.99	17.21	16.44	15.78	15.11	14.61	14.17	13.73
90.0	17.55	16.77	16.00	15.39	14.89	14.45	13.89	13.51	13.01
135.0	18.32	17.44	16.66	15.83	15.28	14.72	14.28	13.78	13.34
180.0	20.59	19.21	18.21	17.38	16.72	15.94	15.39	14.78	14.34
225.0	20.04	18.76	17.82	17.10	16.27	15.67	15.00	14.50	14.06
270.0	20.65	19.60	18.54	17.60	16.77	16.11	15.44	14.95	14.34
315.0	19.32	18.38	17.27	16.61	16.00	15.39	14.72	14.28	13.84
360.0	17.60	16.72	16.11	15.50	14.89	14.45	14.00	13.62	13.06

C/γ(°)	63.0	64.0	65.0	66.0	67.0	68.0	69.0	70.0	71.0
0.0	12.68	12.29	11.90	11.51	11.13	10.79	10.41	10.07	9.80
45.0	13.23	12.79	12.40	12.01	11.57	11.18	10.85	10.46	10.13
90.0	12.62	12.29	11.79	11.40	11.07	10.68	10.35	10.07	9.80
135.0	12.90	12.51	12.18	11.73	11.40	11.07	10.79	10.35	10.07
180.0	13.95	13.45	13.01	12.68	12.29	11.79	11.46	11.13	10.79
225.0	13.51	13.06	12.68	12.29	11.79	11.46	11.07	10.74	10.41
270.0	13.89	13.45	13.01	12.57	12.18	11.68	11.35	11.02	10.57
315.0	13.40	12.90	12.51	12.12	11.62	11.29	10.96	10.52	10.24
360.0	12.68	12.29	11.90	11.51	11.13	10.79	10.41	10.07	9.80

C/γ(°)	72.0	73.0	74.0	75.0	76.0	77.0	78.0	79.0	80.0
0.0	9.41	9.13	8.86	8.58	8.30	8.08	7.86	7.64	7.53
45.0	9.85	9.47	9.19	8.86	8.64	8.41	8.14	7.92	7.69
90.0	9.52	9.19	8.91	8.69	8.36	8.14	7.97	7.69	7.53
135.0	9.80	9.52	9.13	8.91	8.64	8.36	8.14	7.97	7.69
180.0	10.41	10.07	9.80	9.47	9.19	8.91	8.58	8.36	8.08
225.0	10.02	9.74	9.41	9.13	8.86	8.58	8.30	8.08	7.86
270.0	10.30	9.96	9.63	9.35	9.08	8.86	8.52	8.30	8.08
315.0	9.96	9.58	9.30	9.08	8.80	8.47	8.25	8.03	7.86
360.0	9.41	9.13	8.86	8.58	8.30	8.08	7.86	7.64	7.53

C/γ(°)	81.0	82.0	83.0	84.0	85.0	86.0	87.0	88.0	89.0
0.0	7.36	7.20	7.03	6.86	6.75	6.59	6.42	6.25	6.25
45.0	7.53	7.36	7.20	7.03	6.86	6.70	6.53	6.37	6.20
90.0	7.31	7.20	7.03	6.86	6.70	6.59	6.42	6.20	6.20
135.0	7.47	7.31	7.14	6.97	6.86	6.70	6.53	6.42	6.25
180.0	7.92	7.69	7.47	7.36	7.14	6.92	6.81	6.70	6.53
225.0	7.64	7.47	7.36	7.14	6.97	6.81	6.64	6.53	6.42
270.0	7.86	7.64	7.47	7.31	7.09	6.92	6.75	6.59	6.48
315.0	7.64	7.47	7.31	7.14	6.97	6.81	6.70	6.53	6.37
360.0	7.36	7.20	7.03	6.86	6.75	6.59	6.42	6.25	6.25

Intensity data(cd)

C/γ(°)	90.0
0.0	6.25
45.0	6.20
90.0	6.20
135.0	6.20
180.0	6.37
225.0	6.20
270.0	6.31
315.0	6.25
360.0	6.25