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NATA

LumCAT: 3-1548-A3
Luminaire: 99.02.73.172+92.76.365.00

Report No: NATA0100	Voltage(V): 35.1000
Test No: GC2019011508	Current(A): 0.7000
LampCAT: LUMINUS CLM-14-AC30	Power (W): 24.5700
Lamp flux(lm): 3533.0	PF: 0.0000
Number of Lamps: 1	Ballast type: DC
Length(mm): 79	Width(mm): 79
Phm Type: C	Height(mm): 0

Photometric Results

Lumens(lm): 3226.95
Efficiency(%): 91.34%
Lumens(lm)/Power(W): 131.55
Central intensity(cd): 22529.530
Maximum intensity(cd): 22529.530
Angle of maximum intensity: C=0.0 γ=0.0
Beam Angle(50%Imax): [C0/180]Total=15.5
[C90/270]Total=15.5
Field angle(10%Imax): [C0/180]Total=32.7
[C90/270]Total=32.7
Maximum s/h(1/2): C0_180=0.27 C90_270=0.27
Maximum s/h(1/4): C0_180=0.27 C90_270=0.27
Up flux rate of lamp(%): 0.00%
Down flux rate of lamp(%): 91.49%
Up flux rate of LUM(%): - -
Down flux rate of LUM(%): 100.00%
CIE Type : Direct lighting
Output flux ratio in π solid angle : 98.580%

Zonal flux distribution table

γ(°)	Average I(cd)	Zonal F(lm)	Sum F(lm)	Eff Flux(%)	Eff Sum(%)
0.0	22529.531	5.390	5.39	.153%	.167%
1.0	22291.172	42.662	48.052	1.208%	1.489%
2.0	21427.734	82.006	130.058	2.321%	4.030%
3.0	20216.250	116.025	246.083	3.284%	7.626%
4.0	18738.281	143.340	389.423	4.057%	12.068%
5.0	16649.227	159.126	548.549	4.504%	16.999%
6.0	14638.430	167.796	716.345	4.749%	22.199%
7.0	12788.297	170.907	887.252	4.837%	27.495%
8.0	10757.883	164.185	1051.437	4.647%	32.583%
9.0	8641.195	148.237	1199.674	4.196%	37.177%
10.0	7215.188	137.395	1337.069	3.889%	41.434%
11.0	5813.367	121.641	1458.709	3.443%	45.204%
12.0	4683.656	106.786	1565.496	3.023%	48.513%
13.0	3815.930	94.133	1659.628	2.664%	51.430%
14.0	3107.391	82.437	1742.065	2.333%	53.985%
15.0	2664.352	75.620	1817.686	2.140%	56.328%
16.0	2335.852	70.605	1888.291	1.998%	58.516%
17.0	2086.875	66.909	1955.2	1.894%	60.590%
18.0	1859.977	63.029	2018.229	1.784%	62.543%
19.0	1726.523	61.640	2079.869	1.745%	64.453%
20.0	1610.578	60.407	2140.276	1.710%	66.325%
21.0	1521.141	59.779	2200.055	1.692%	68.178%
22.0	1458.352	59.909	2259.964	1.696%	70.034%
23.0	1405.477	60.222	2320.186	1.705%	71.900%
24.0	1359.000	60.616	2380.801	1.716%	73.779%
25.0	1320.820	61.213	2442.014	1.733%	75.676%
26.0	1285.875	61.815	2503.829	1.750%	77.591%
27.0	1250.227	62.243	2566.071	1.762%	79.520%
28.0	1218.586	62.736	2628.808	1.776%	81.464%
29.0	1181.447	62.811	2691.619	1.778%	83.411%
30.0	1143.788	62.714	2754.333	1.775%	85.354%
31.0	1095.553	61.876	2816.209	1.751%	87.272%
32.0	1019.201	59.227	2875.437	1.676%	89.107%
33.0	940.366	56.164	2931.601	1.590%	90.847%
34.0	843.370	51.717	2983.317	1.464%	92.450%
35.0	720.612	45.326	3028.643	1.283%	93.855%
36.0	583.348	37.601	3066.244	1.064%	95.020%
37.0	468.640	30.928	3097.172	.875%	95.978%

Zonal flux distribution table

γ(°)	Average I(cd)	Zonal F(lm)	Sum F(lm)	Eff Flux(%)	Eff Sum(%)
38.0	337.226	22.767	3119.94	.644%	96.684%
39.0	227.609	15.708	3135.647	.445%	97.171%
40.0	159.265	11.226	3146.874	.318%	97.519%
41.0	100.877	7.258	3154.131	.205%	97.743%
42.0	52.545	3.856	3157.987	.109%	97.863%
43.0	36.176	2.706	3160.692	.077%	97.947%
44.0	30.192	2.300	3162.992	.065%	98.018%
45.0	25.242	1.957	3164.95	.055%	98.079%
46.0	22.310	1.760	3166.709	.050%	98.133%
47.0	20.116	1.613	3168.323	.046%	98.183%
48.0	18.267	1.489	3169.811	.042%	98.229%
49.0	17.184	1.422	3171.234	.040%	98.273%
50.0	16.748	1.407	3172.641	.040%	98.317%
51.0	16.390	1.397	3174.037	.040%	98.360%
52.0	16.073	1.389	3175.426	.039%	98.403%
53.0	15.764	1.381	3176.807	.039%	98.446%
54.0	15.462	1.372	3178.179	.039%	98.489%
55.0	15.223	1.367	3179.546	.039%	98.531%
56.0	14.970	1.361	3180.907	.039%	98.573%
57.0	14.766	1.358	3182.265	.038%	98.615%
58.0	14.562	1.354	3183.619	.038%	98.657%
59.0	14.393	1.353	3184.972	.038%	98.699%
60.0	14.210	1.350	3186.322	.038%	98.741%
61.0	14.063	1.349	3187.67	.038%	98.783%
62.0	13.922	1.348	3189.018	.038%	98.825%
63.0	13.795	1.348	3190.366	.038%	98.866%
64.0	13.704	1.351	3191.717	.038%	98.908%
65.0	13.598	1.352	3193.069	.038%	98.950%
66.0	13.493	1.352	3194.42	.038%	98.992%
67.0	13.416	1.354	3195.774	.038%	99.034%
68.0	13.359	1.358	3197.133	.038%	99.076%
69.0	13.268	1.358	3198.491	.038%	99.118%
70.0	13.226	1.363	3199.854	.039%	99.160%
71.0	13.163	1.365	3201.219	.039%	99.203%
72.0	13.120	1.368	3202.587	.039%	99.245%
73.0	13.092	1.373	3203.96	.039%	99.288%
74.0	13.050	1.376	3205.336	.039%	99.330%
75.0	13.008	1.378	3206.714	.039%	99.373%

Zonal flux distribution table

γ(°)	Average I(cd)	Zonal F(lm)	Sum F(lm)	Eff Flux(%)	Eff Sum(%)
76.0	12.987	1.382	3208.095	.039%	99.416%
77.0	12.952	1.384	3209.479	.039%	99.459%
78.0	12.930	1.387	3210.866	.039%	99.502%
79.0	12.916	1.390	3212.257	.039%	99.545%
80.0	12.895	1.393	3213.649	.039%	99.588%
81.0	12.881	1.395	3215.044	.039%	99.631%
82.0	12.888	1.400	3216.444	.040%	99.675%
83.0	12.895	1.404	3217.848	.040%	99.718%
84.0	12.945	1.412	3219.259	.040%	99.762%
85.0	12.938	1.413	3220.673	.040%	99.806%
86.0	12.762	1.396	3222.069	.040%	99.849%
87.0	12.741	1.395	3223.464	.039%	99.892%
88.0	12.727	1.395	3224.859	.039%	99.935%
89.0	12.698	1.392	3226.251	.039%	99.978%
90.0	12.698	0.696	3226.947	.020%	100.000%

Zonal flux distribution table

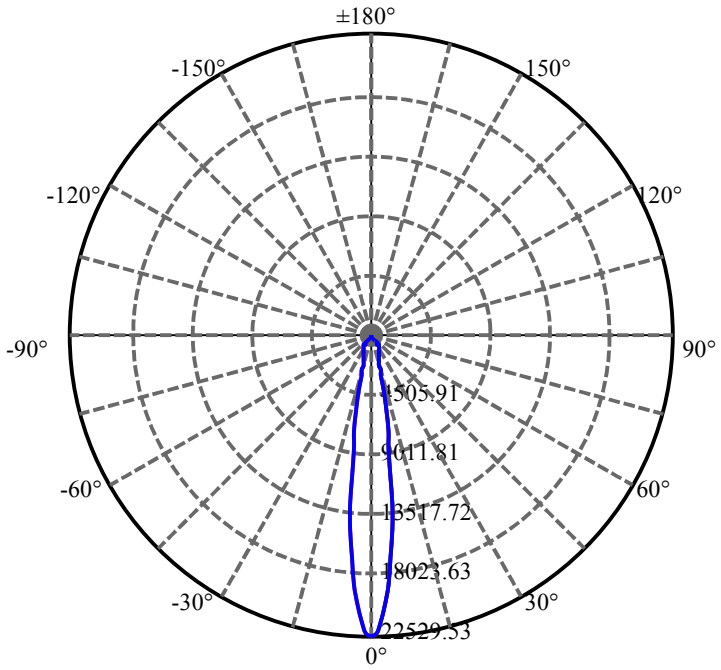
ZONAL LUMEN SUMMARY

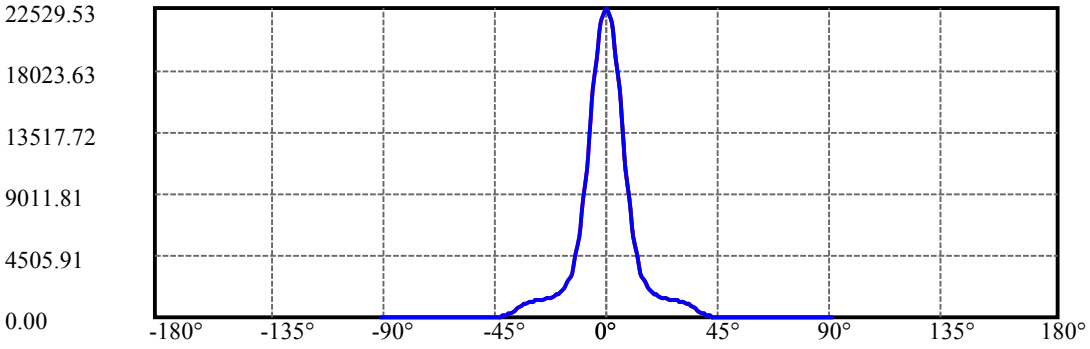
Zone	Lumens	%Lamp	%Fixt
0-30	2754.33	77.96%	85.35%
0-40	3146.87	89.07%	97.52%
0-60	3186.32	90.19%	98.74%
0-90	3226.25	91.32%	99.98%
0-120	3226.25	91.32%	99.98%
0-180	3226.95	91.34%	100.00%
60-90	41.28	1.17%	1.28%
90-120	0.00	0.00%	0.00%
90-130	0.00	0.00%	0.00%
90-150	0.00	0.00%	0.00%
90-180	0.00	0.00%	0.00%
0-27.25	2581.56	73.07%	80.00%

ZONAL LUMEN SUMMARY

0-10	1337.07
10-20	803.21
20-30	614.06
30-40	392.54
40-50	25.77
50-60	13.68
60-70	13.53
70-80	13.80
80-90	12.60
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):

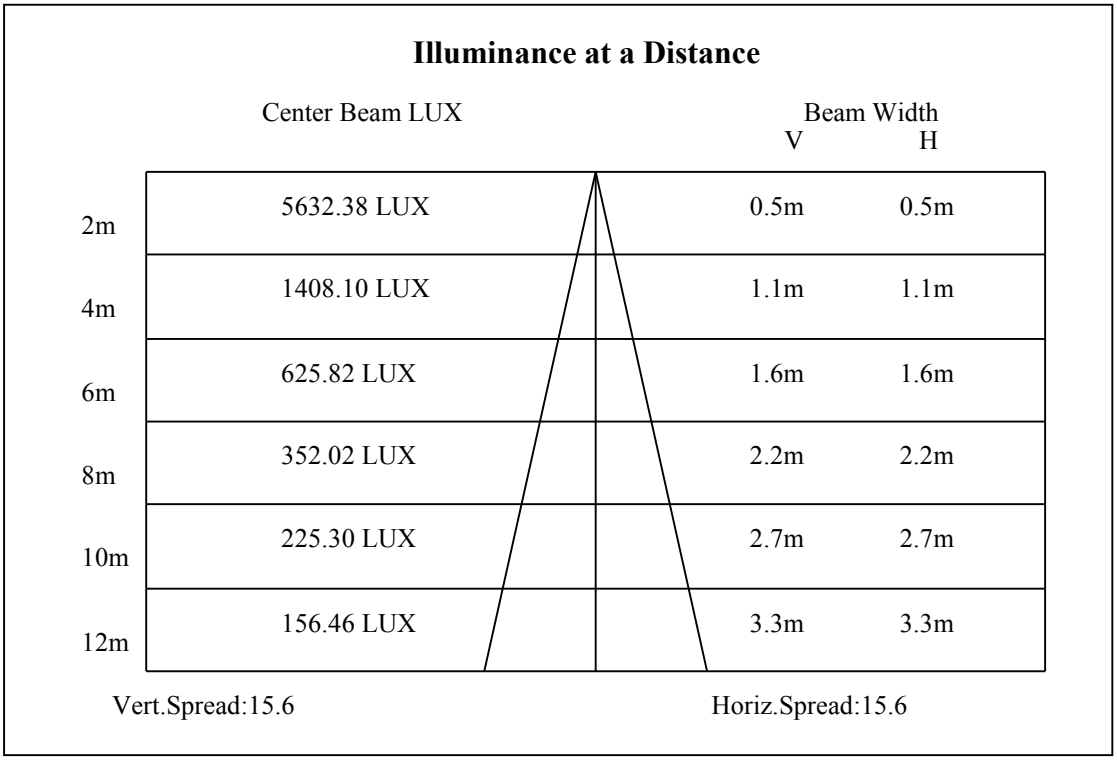
C0/C180:

C90/C270:

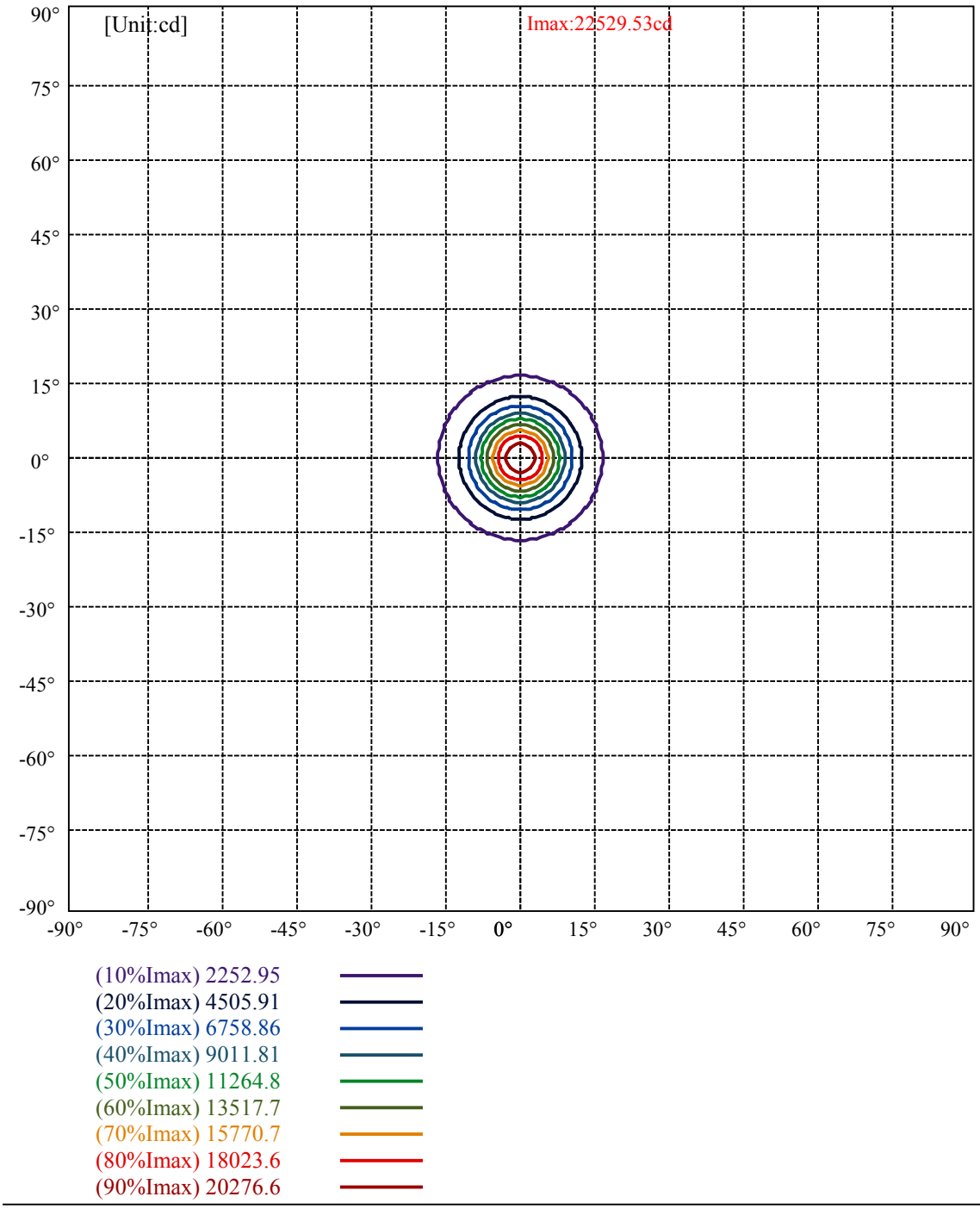
Field angle(10%Imax):C0/180Left:16.3 Right:16.3
:C90/270Left:16.3 Right:16.3

Beam Angle(50%Imax):C0/180Left:7.8 Right:7.8
:C90/270Left:7.8 Right:7.8

Lux distance Curve



ISO-Intensity(V-H)

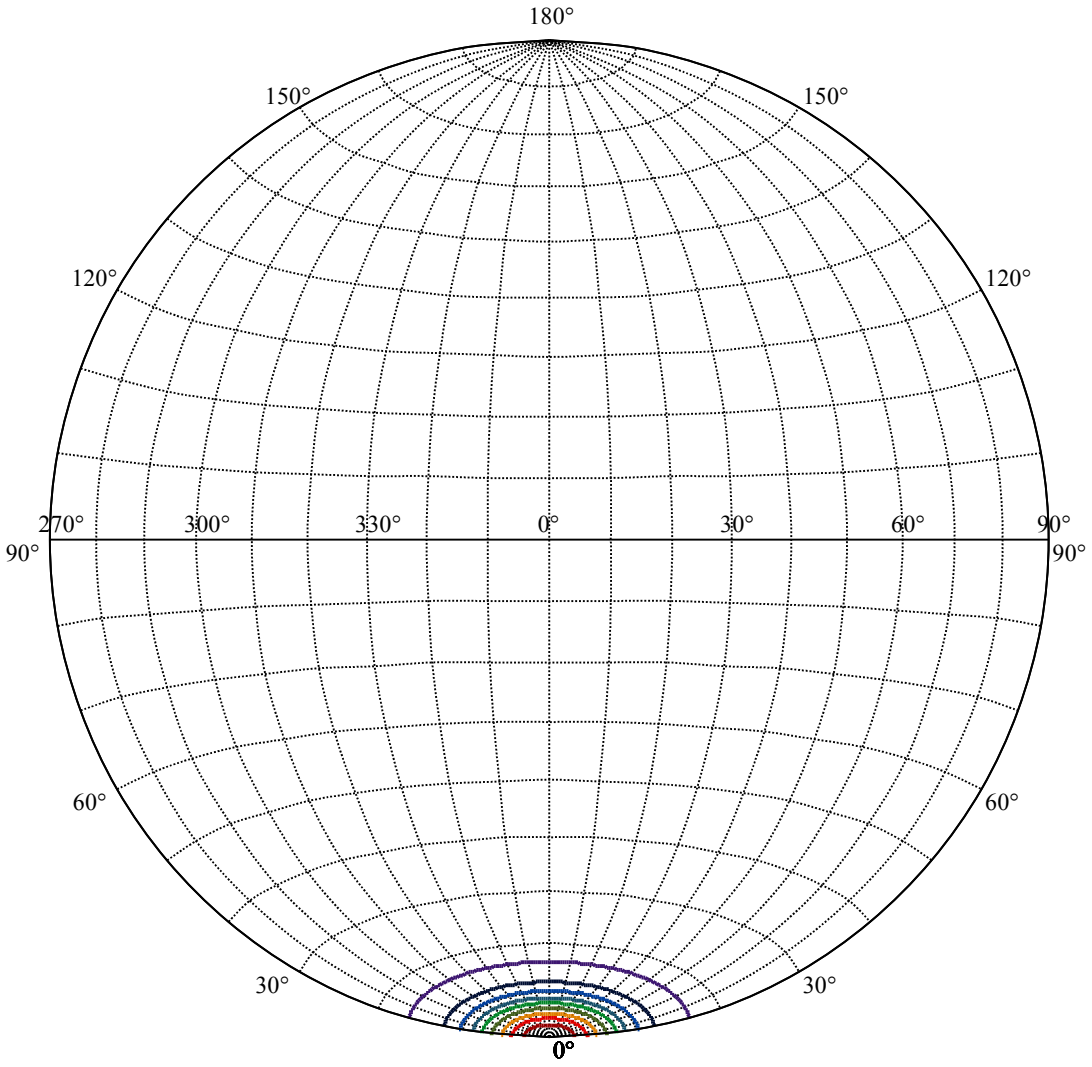


Equipment: GMS1980
Temperature(°C): 10.0

Date: 2019/1/15
Humidity(%): 65.0%

Operator: NT07
Distance(m): 7.50

ISO candela diagram on circular web



House [Unit:cd] Road

Imax:22529.53

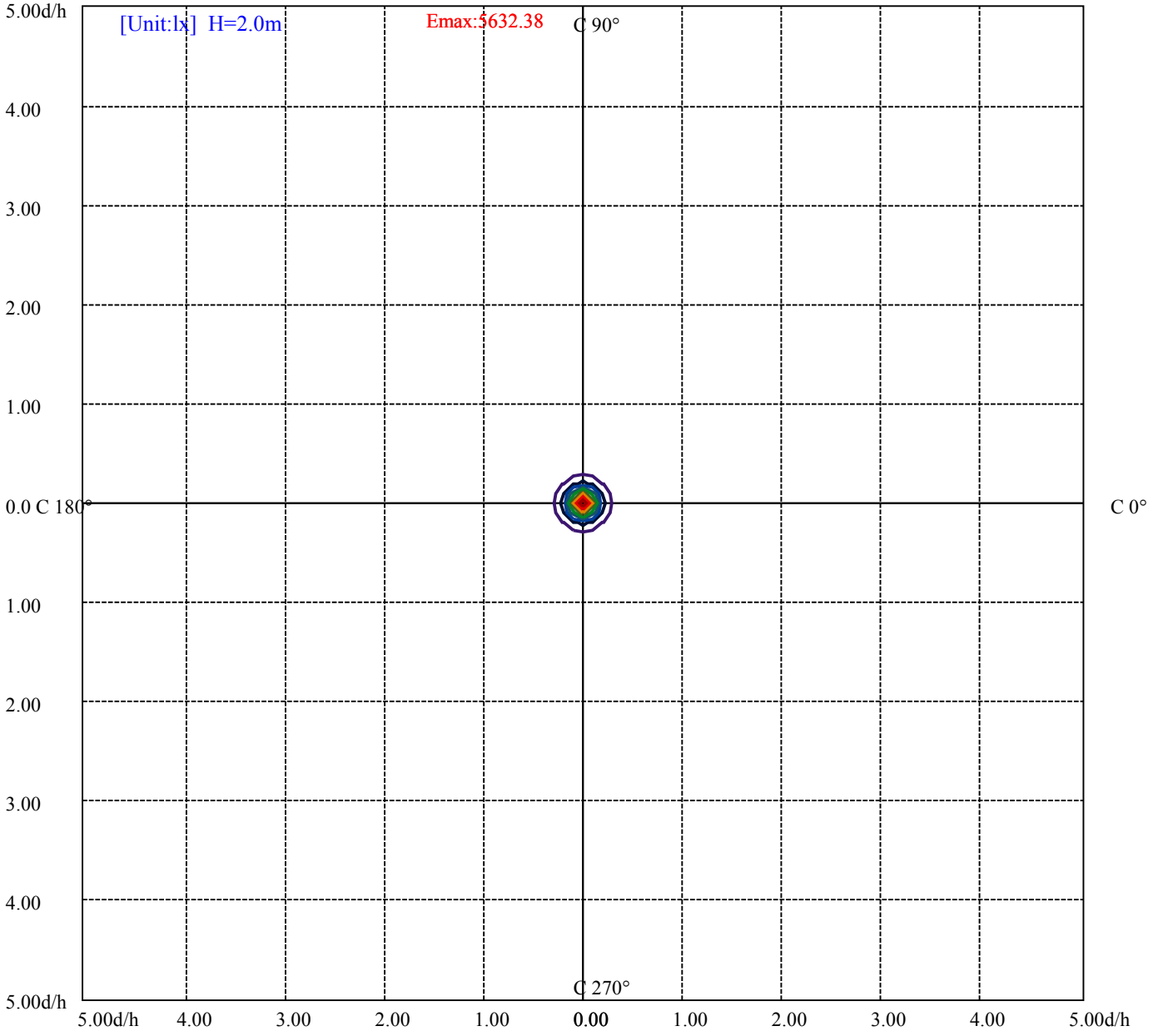
(10%Imax) 2252.95
(20%Imax) 4505.91
(30%Imax) 6758.86
(40%Imax) 9011.81
(50%Imax) 11264.8
(60%Imax) 13517.7
(70%Imax) 15770.7
(80%Imax) 18023.6
(90%Imax) 20276.6

Equipment: GMS1980
Temperature(°C): 10.0

Date: 2019/1/15
Humidity(%): 65.0%

Operator: NT07
Distance(m): 7.50

ISO illuminance diagram

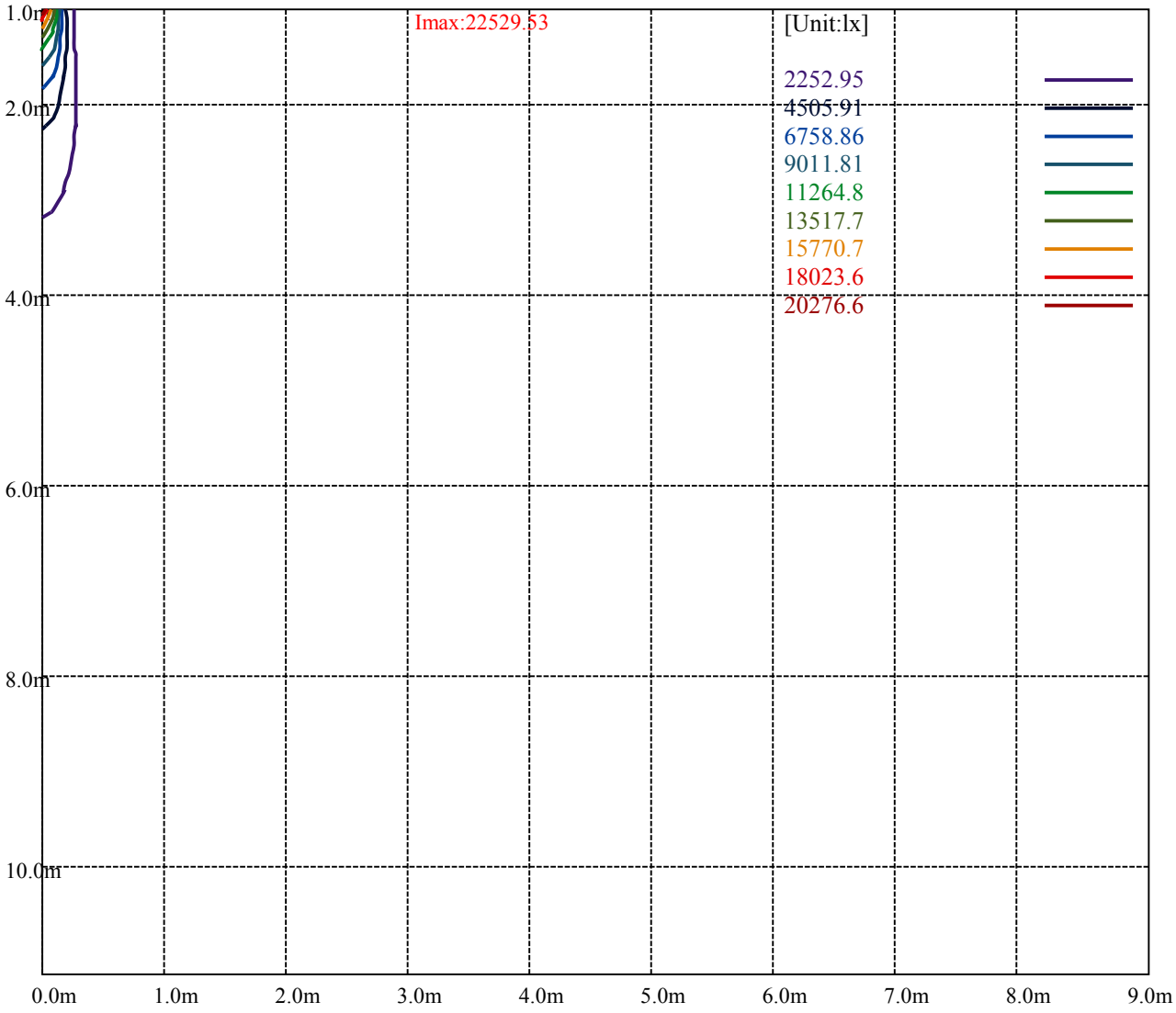


Equipment: GMS1980
Temperature(°C): 10.0

Date: 2019/1/15
Humidity(%): 65.0%

Operator: NT07
Distance(m): 7.50

Space ISO Lux diagram



Equipment: GMS1980
Temperature(°C): 10.0

Date: 2019/1/15
Humidity(%): 65.0%

Operator: NT07
Distance(m): 7.50

Luminance Limitting Curve(no luminous side)

Luminance Table

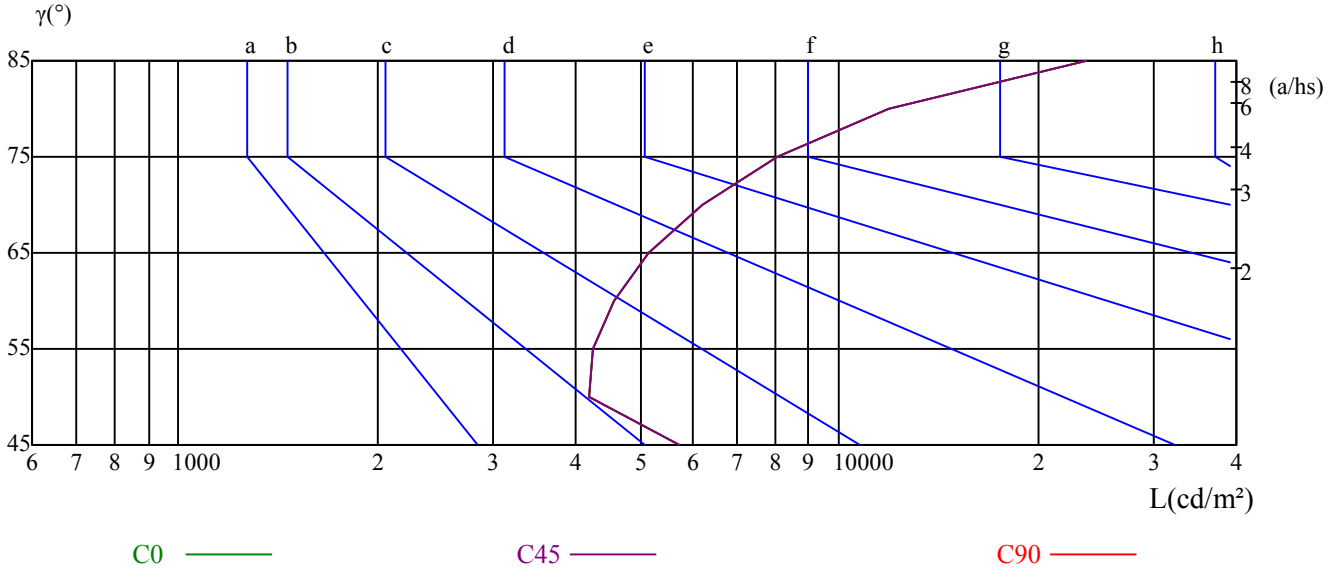
γ	45	50	55	60	65	70	75	80	85
C0	5720	4175	4253	4554	5156	6196	8053	11899	23785
C45	5720	4175	4253	4554	5156	6196	8053	11899	23785
C90	5720	4175	4253	4554	5156	6196	8053	11899	23785

L(Hor)(65)	L(Ver)(65)	L45(65)	L(Hor)(75)	L(Ver)(75)	L45(75)	L(Hor)(85)	L(Ver)(85)	L45(85)
5156	5156	5156	8053	8053	8053	23785	23785	23785

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

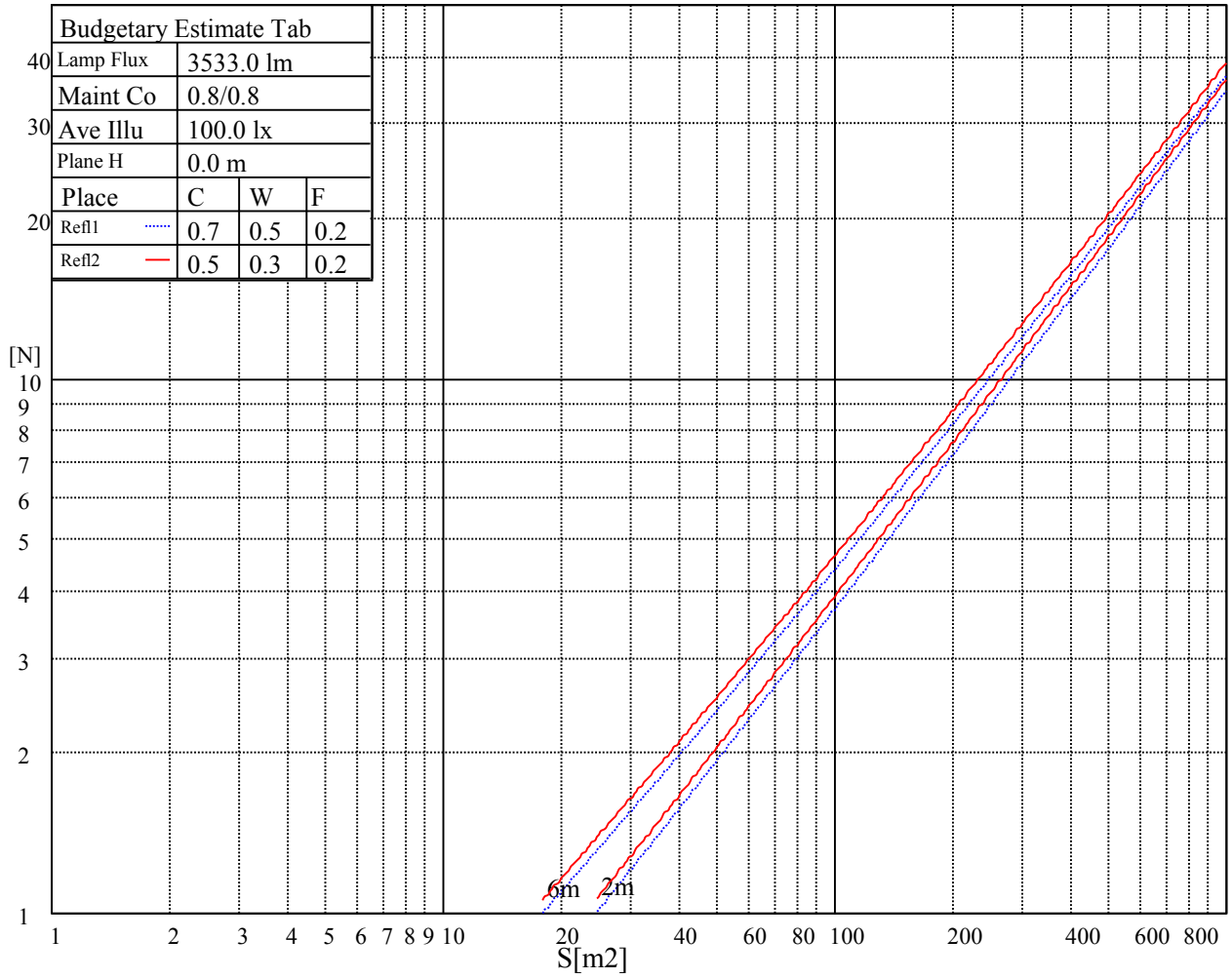


UGR Glare

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	1.71	2.62	2.07	2.93	3.25	1.73	2.64	2.10	2.95	3.27
	3H	4.78	5.58	5.16	5.92	6.29	4.82	5.63	5.21	5.96	6.33
	4H	6.48	7.22	6.89	7.58	7.97	6.55	7.29	6.96	7.64	8.04
	6H	8.42	9.10	8.84	9.48	9.87	8.50	9.18	8.92	9.55	9.95
	8H	9.50	10.14	9.94	10.53	10.94	9.61	10.24	10.04	10.64	11.05
	12H	11.26	11.87	11.70	12.25	12.68	11.43	12.04	11.87	12.42	12.85
4H	2H	2.56	3.30	2.97	3.66	4.05	2.58	3.32	2.99	3.67	4.07
	3H	5.90	6.51	6.32	6.92	7.33	5.93	6.54	6.35	6.95	7.36
	4H	7.77	8.32	8.21	8.74	9.19	7.83	8.38	8.27	8.80	9.25
	6H	9.89	10.35	10.36	10.80	11.28	9.96	10.42	10.43	10.87	11.35
	8H	11.07	11.50	11.55	11.95	12.43	11.16	11.60	11.64	12.05	12.53
	12H	12.73	13.10	13.22	13.59	14.07	12.89	13.26	13.38	13.75	14.23
8H	4H	8.50	8.93	8.97	9.38	9.86	8.54	8.97	9.02	9.42	9.90
	6H	10.89	11.23	11.40	11.73	12.22	10.94	11.28	11.45	11.79	12.27
	8H	12.26	12.56	12.80	13.09	13.59	12.34	12.64	12.88	13.17	13.67
	12H	14.06	14.32	14.58	14.82	15.40	14.20	14.46	14.73	14.96	15.54
12H	4H	8.70	9.08	9.20	9.57	10.04	8.74	9.12	9.24	9.61	10.08
	6H	11.40	11.51	11.74	11.98	12.53	11.45	11.56	11.79	12.03	12.58
	8H	12.72	12.97	13.24	13.47	14.06	12.79	13.05	13.31	13.55	14.13

Variation with the observer position at spacings:		
S = 1.0H	5.6/-7.5	5.6/-7.5
S = 1.5H	7.8/-5.6	7.8/-5.6
S = 2.0H	9.1/-4.2	9.1/-4.2
Standard tables:	BK3	BK3
Uncorrected UGR	1.7	1.7

Budgetary Estimate Table

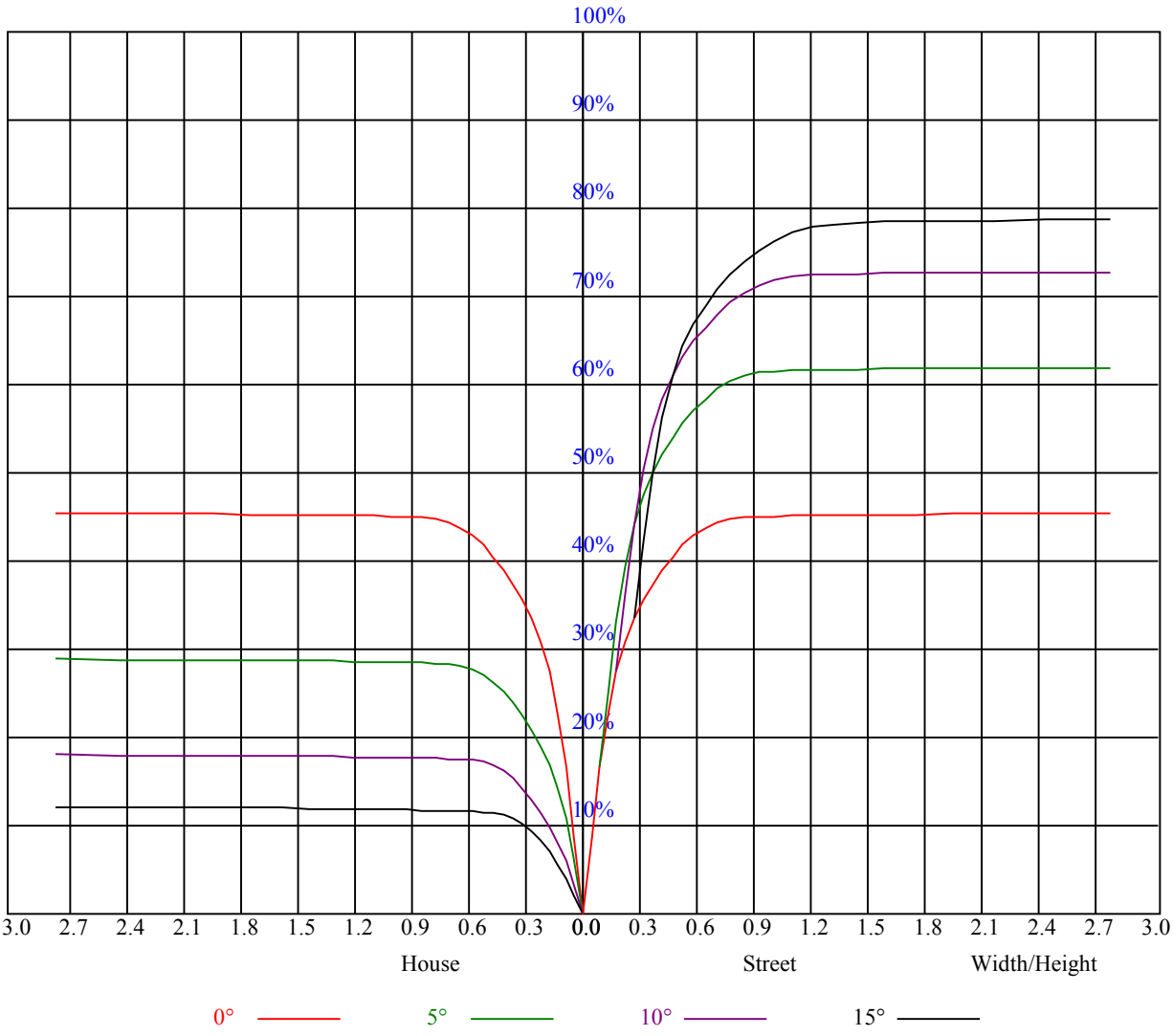


Equipment: GMS1980 Date: 2019/1/15 Operator: NT07
Temperature(°C): 10.0 Humidity(%): 65.0% Distance(m): 7.50

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	1.09	1.09	1.09	1.06	1.06	1.06	1.02	1.02	1.02	0.97	0.97	0.97	0.93	0.93	0.93	0.91
1	1.03	1.01	0.99	1.01	0.99	0.97	0.97	0.96	0.94	0.94	0.92	0.91	0.90	0.90	0.89	0.87
2	0.97	0.94	0.92	0.96	0.93	0.91	0.93	0.91	0.89	0.90	0.88	0.87	0.88	0.86	0.85	0.84
3	0.93	0.89	0.86	0.91	0.88	0.86	0.89	0.86	0.84	0.87	0.85	0.83	0.85	0.83	0.82	0.80
4	0.89	0.85	0.82	0.88	0.84	0.81	0.86	0.83	0.80	0.84	0.82	0.79	0.83	0.80	0.79	0.77
5	0.85	0.81	0.78	0.84	0.81	0.78	0.83	0.80	0.77	0.81	0.79	0.76	0.80	0.78	0.76	0.75
6	0.82	0.78	0.75	0.81	0.77	0.75	0.80	0.77	0.74	0.79	0.76	0.74	0.78	0.75	0.73	0.72
7	0.79	0.75	0.72	0.79	0.75	0.72	0.78	0.74	0.72	0.77	0.74	0.71	0.76	0.73	0.71	0.70
8	0.77	0.72	0.70	0.76	0.72	0.70	0.75	0.72	0.69	0.74	0.71	0.69	0.74	0.71	0.69	0.68
9	0.74	0.70	0.67	0.74	0.70	0.67	0.73	0.70	0.67	0.72	0.69	0.67	0.72	0.69	0.67	0.66
10	0.72	0.68	0.65	0.72	0.68	0.65	0.71	0.68	0.65	0.70	0.67	0.65	0.70	0.67	0.65	0.64

Coefficient Utilization Curve



Equipment: GMS1980	Date: 2019/1/15	Operator: NT07
Temperature(°C): 10.0	Humidity(%): 65.0%	Distance(m): 7.50

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	22033.13	23186.25	23906.25	23906.25	23338.13	21903.75	20368.13	18551.25	16801.88
45.0	22871.25	23028.75	22488.75	21526.88	20188.13	18056.25	16115.63	14051.25	11756.25
90.0	22483.13	21526.88	19777.50	18067.50	16149.38	13888.13	11115.56	9680.63	7689.38
135.0	22730.63	21397.50	19254.38	17302.50	15243.75	12667.50	10687.50	8831.25	6975.00
180.0	22033.13	20486.25	18416.25	16149.38	14051.25	11226.94	9781.88	7785.00	6071.63
225.0	22871.25	22185.00	20885.63	19136.25	17325.00	15086.25	12391.88	10866.38	8807.06
270.0	22483.13	22955.63	22815.00	22106.25	20947.50	19203.75	17161.88	15204.38	12960.00
315.0	22730.63	23563.13	23878.13	23535.00	22663.13	21161.25	19485.00	17336.25	15001.88
360.0	22033.13	23186.25	23906.25	23906.25	23338.13	21903.75	20368.13	18551.25	16801.88

C/γ(°)	9.0	10.0	11.0	12.0	13.0	14.0	15.0	16.0	17.0
0.0	13899.38	11801.25	10040.63	7723.13	5934.38	4815.00	3706.88	3043.13	2868.75
45.0	9579.38	7779.38	6007.50	4753.13	3774.38	3110.63	2885.63	2324.25	2102.63
90.0	6143.63	4782.38	3841.88	3241.13	2784.94	2356.88	2104.31	1915.88	1754.44
135.0	5445.00	4410.00	3583.13	3043.13	2874.38	2319.75	2036.25	1851.19	1741.50
180.0	4859.44	3899.25	3228.75	2781.56	2429.44	2104.31	1912.50	1769.06	1648.69
225.0	7156.13	5578.88	4381.88	3637.13	3093.75	2593.69	2292.19	2055.38	1856.25
270.0	11008.13	8932.50	7048.13	5625.00	4393.13	3560.63	3031.88	2863.13	2254.50
315.0	11038.50	10537.88	8375.06	6665.06	5243.06	3998.25	3345.19	2864.81	2468.25
360.0	13899.38	11801.25	10040.63	7723.13	5934.38	4815.00	3706.88	3043.13	2868.75

C/γ(°)	18.0	19.0	20.0	21.0	22.0	23.0	24.0	25.0	26.0
0.0	2289.38	2056.50	1851.75	1700.44	1600.88	1525.50	1452.38	1404.56	1361.81
45.0	1851.75	1707.19	1601.44	1510.31	1450.13	1404.56	1358.44	1323.56	1292.63
90.0	1635.19	1554.19	1482.75	1424.81	1380.94	1339.31	1307.25	1274.06	1243.13
135.0	1620.56	1544.63	1483.88	1422.56	1379.25	1342.13	1302.19	1269.56	1241.44
180.0	1558.13	1495.69	1437.75	1388.81	1351.13	1315.13	1285.88	1254.38	1219.50
225.0	1711.13	1614.38	1532.25	1469.25	1423.69	1379.81	1345.50	1310.63	1276.88
270.0	2027.25	1850.06	1688.06	1593.56	1521.00	1463.06	1404.56	1364.63	1329.19
315.0	2186.44	1989.56	1806.75	1659.38	1559.81	1474.31	1415.81	1365.19	1322.44
360.0	2289.38	2056.50	1851.75	1700.44	1600.88	1525.50	1452.38	1404.56	1361.81

C/γ(°)	27.0	28.0	29.0	30.0	31.0	32.0	33.0	34.0	35.0
0.0	1315.13	1281.38	1249.31	1215.56	1180.13	1155.38	1131.75	1095.19	1022.63
45.0	1254.38	1224.00	1191.94	1159.31	1131.19	1101.94	1019.81	906.75	790.31
90.0	1212.75	1184.06	1121.46	1116.34	1049.63	926.21	808.59	685.97	531.51
135.0	1201.50	1173.94	1148.06	1103.63	1008.56	898.31	761.63	635.63	492.19
180.0	1190.81	1163.81	1117.18	1057.16	960.86	801.68	691.82	566.66	422.04
225.0	1247.63	1214.44	1179.56	1121.18	1114.31	1015.76	910.01	788.57	659.76
270.0	1292.63	1256.63	1226.25	1188.56	1157.63	1134.00	1089.56	1011.94	895.50
315.0	1287.00	1250.44	1217.81	1188.56	1162.13	1120.33	1109.76	1056.26	950.96
360.0	1315.13	1281.38	1249.31	1215.56	1180.13	1155.38	1131.75	1095.19	1022.63

C/γ(°)	36.0	37.0	38.0	39.0	40.0	41.0	42.0	43.0	44.0
0.0	902.81	776.81	626.63	481.50	354.38	294.19	117.79	63.51	51.36
45.0	649.13	523.69	385.88	284.63	151.93	79.37	50.74	42.69	34.59
90.0	408.54	290.70	162.00	84.32	47.76	38.87	31.67	26.61	22.56
135.0	349.88	290.81	121.05	55.35	41.63	33.75	25.43	22.61	19.13
180.0	281.25	170.83	81.56	43.43	36.56	27.79	23.40	20.36	18.56
225.0	495.39	369.39	251.55	125.38	60.58	42.13	33.36	24.98	22.05
270.0	759.38	631.69	519.19	341.44	296.44	124.99	52.37	40.73	32.68
315.0	820.41	695.19	549.96	404.83	284.85	165.94	85.61	47.93	40.61
360.0	902.81	776.81	626.63	481.50	354.38	294.19	117.79	63.51	51.36

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	41.40	33.81	29.93	23.51	18.11	17.61	17.16	16.76	16.37
45.0	29.25	23.96	17.78	17.33	16.82	16.48	16.14	15.86	15.58
90.0	18.11	17.66	17.16	16.65	16.37	15.92	15.69	15.47	15.19
135.0	17.72	17.27	16.88	16.54	16.20	15.92	15.64	15.41	15.13
180.0	18.11	17.66	17.10	16.82	16.48	16.14	15.81	15.58	15.30
225.0	20.03	18.68	18.06	17.49	17.10	16.65	16.26	15.98	15.75
270.0	24.75	21.88	20.08	18.56	18.00	17.55	17.10	16.71	16.31
315.0	32.57	27.56	23.96	19.24	18.39	17.72	17.33	16.82	16.48
360.0	41.40	33.81	29.93	23.51	18.11	17.61	17.16	16.76	16.37

C/γ(°)	54.0	55.0	56.0	57.0	58.0	59.0	60.0	61.0	62.0
0.0	16.09	15.81	15.53	15.30	15.02	14.79	14.57	14.40	14.23
45.0	15.36	15.13	14.85	14.68	14.46	14.34	14.12	14.06	13.89
90.0	14.96	14.74	14.46	14.34	14.18	14.01	13.89	13.73	13.61
135.0	14.85	14.68	14.51	14.34	14.23	14.12	13.95	13.84	13.73
180.0	15.02	14.85	14.63	14.46	14.34	14.18	14.06	13.89	13.78
225.0	15.41	15.19	14.96	14.74	14.51	14.34	14.18	14.01	13.89
270.0	15.92	15.64	15.41	15.08	14.85	14.68	14.46	14.29	14.06
315.0	16.09	15.75	15.41	15.19	14.91	14.68	14.46	14.29	14.18
360.0	16.09	15.81	15.53	15.30	15.02	14.79	14.57	14.40	14.23

C/γ(°)	63.0	64.0	65.0	66.0	67.0	68.0	69.0	70.0	71.0
0.0	14.12	14.01	13.95	13.78	13.67	13.56	13.50	13.44	13.33
45.0	13.78	13.67	13.56	13.44	13.33	13.33	13.22	13.16	13.11
90.0	13.50	13.44	13.33	13.28	13.22	13.16	13.05	13.05	12.99
135.0	13.56	13.50	13.44	13.33	13.28	13.28	13.22	13.16	13.11
180.0	13.73	13.61	13.56	13.50	13.44	13.39	13.33	13.28	13.22
225.0	13.73	13.67	13.50	13.44	13.39	13.33	13.22	13.22	13.16
270.0	13.95	13.84	13.73	13.56	13.44	13.39	13.28	13.22	13.16
315.0	14.01	13.89	13.73	13.61	13.56	13.44	13.33	13.28	13.22
360.0	14.12	14.01	13.95	13.78	13.67	13.56	13.50	13.44	13.33

C/γ(°)	72.0	73.0	74.0	75.0	76.0	77.0	78.0	79.0	80.0
0.0	13.28	13.28	13.22	13.16	13.11	13.11	13.05	13.05	13.05
45.0	13.05	13.05	12.99	12.94	12.94	12.88	12.88	12.83	12.83
90.0	12.99	12.94	12.94	12.88	12.88	12.83	12.83	12.83	12.77
135.0	13.05	13.05	12.99	12.99	12.99	12.94	12.94	12.88	12.88
180.0	13.16	13.16	13.11	13.11	13.11	13.05	13.05	13.05	13.05
225.0	13.11	13.05	12.99	12.94	12.94	12.88	12.88	12.88	12.83
270.0	13.16	13.05	13.05	12.99	12.94	12.94	12.88	12.88	12.88
315.0	13.16	13.16	13.11	13.05	12.99	12.99	12.94	12.94	12.88
360.0	13.28	13.28	13.22	13.16	13.11	13.11	13.05	13.05	13.05

C/γ(°)	81.0	82.0	83.0	84.0	85.0	86.0	87.0	88.0	89.0
0.0	12.99	12.99	12.94	12.94	12.94	12.88	12.94	12.88	12.83
45.0	12.83	12.77	12.77	12.77	12.71	12.66	12.66	12.66	12.60
90.0	12.77	12.77	12.71	12.71	12.66	12.66	12.66	12.66	12.60
135.0	12.88	12.88	12.88	12.88	12.88	12.71	12.71	12.71	12.71
180.0	13.05	13.11	13.39	13.67	13.73	12.77	12.77	12.83	12.83
225.0	12.83	12.88	12.88	12.99	12.99	12.94	12.71	12.66	12.66
270.0	12.83	12.83	12.77	12.77	12.77	12.71	12.71	12.66	12.66
315.0	12.88	12.88	12.83	12.83	12.83	12.77	12.77	12.77	12.71
360.0	12.99	12.99	12.94	12.94	12.94	12.88	12.94	12.88	12.83

Intensity data(cd)

C/γ(°)	90.0
0.0	12.83
45.0	12.66
90.0	12.60
135.0	12.71
180.0	12.77
225.0	12.66
270.0	12.66
315.0	12.71
360.0	12.83