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NATA

LumCAT: 1449-E
Luminaire:

Report No: NATA0100	Voltage(V): 28.8000
Test No: GC2019010905	Current(A): 0.3600
LampCAT: XICATO XTM LES 9MM	Power (W): 10.3680
Lamp flux(lm): 568.0	PF: 0.0000
Number of Lamps: 1	Ballast type: DC
Length(mm): 44	Width(mm): 44
Phm Type: C	Height(mm): 0

Photometric Results

Lumens(lm): 519.12
Efficiency(%): 91.39%
Lumens(lm)/Power(W): 50.13
Central intensity(cd): 2579.766
Maximum intensity(cd): 2579.766
Angle of maximum intensity: C=0.0 γ=0.0
Beam Angle(50%Imax): [C0/180]Total=16.5
[C90/270]Total=16.5
Field angle(10%Imax): [C0/180]Total=37.5
[C90/270]Total=37.5
Maximum s/h(1/2): C0_180=0.29 C90_270=0.29
Maximum s/h(1/4): C0_180=0.28 C90_270=0.28
Up flux rate of lamp(%): 0.00%
Down flux rate of lamp(%): 91.50%
Up flux rate of LUM(%): - -
Down flux rate of LUM(%): 100.00%
CIE Type : Direct lighting
Output flux ratio in π solid angle : 98.450%

Equipment: GMS1980	Date: 2019/1/9	Operator: NT07
Temperature(°C): 10.0	Humidity(%): 65.0%	Distance(m): 7.50

Zonal flux distribution table

γ(°)	Average I(cd)	Zonal F(lm)	Sum F(lm)	Eff Flux(%)	Eff Sum(%)
0.0	2579.766	0.617	0.617	.109%	.119%
1.0	2566.477	4.912	5.529	.865%	1.065%
2.0	2513.180	9.618	15.147	1.693%	2.918%
3.0	2425.359	13.920	29.067	2.451%	5.599%
4.0	2304.000	17.625	46.691	3.103%	8.994%
5.0	2129.273	20.351	67.042	3.583%	12.915%
6.0	1907.297	21.863	88.905	3.849%	17.126%
7.0	1657.617	22.153	111.058	3.900%	21.394%
8.0	1367.606	20.872	131.93	3.675%	25.414%
9.0	1076.055	18.459	150.389	3.250%	28.970%
10.0	895.198	17.047	167.436	3.001%	32.254%
11.0	717.912	15.022	182.458	2.645%	35.148%
12.0	576.788	13.151	195.609	2.315%	37.681%
13.0	471.677	11.635	207.244	2.049%	39.922%
14.0	394.080	10.455	217.699	1.841%	41.936%
15.0	342.190	9.712	227.411	1.710%	43.807%
16.0	306.070	9.251	236.662	1.629%	45.589%
17.0	284.576	9.124	245.786	1.606%	47.347%
18.0	267.525	9.066	254.852	1.596%	49.093%
19.0	255.052	9.106	263.958	1.603%	50.847%
20.0	247.064	9.266	273.224	1.631%	52.633%
21.0	240.848	9.465	282.689	1.666%	54.456%
22.0	236.102	9.699	292.388	1.708%	56.324%
23.0	231.405	9.915	302.304	1.746%	58.234%
24.0	226.631	10.108	312.412	1.780%	60.181%
25.0	222.019	10.289	322.702	1.812%	62.164%
26.0	217.498	10.456	333.157	1.841%	64.178%
27.0	212.456	10.577	343.734	1.862%	66.215%
28.0	208.083	10.713	354.447	1.886%	68.279%
29.0	203.428	10.815	365.262	1.904%	70.362%
30.0	198.914	10.907	376.169	1.920%	72.463%
31.0	194.407	10.980	387.149	1.933%	74.578%
32.0	189.886	11.035	398.183	1.943%	76.704%
33.0	185.484	11.078	409.261	1.950%	78.838%
34.0	180.773	11.085	420.347	1.952%	80.973%
35.0	175.324	11.028	431.374	1.941%	83.098%
36.0	168.645	10.870	442.245	1.914%	85.192%
37.0	160.601	10.599	452.844	1.866%	87.233%

Zonal flux distribution table

γ(°)	Average I(cd)	Zonal F(lm)	Sum F(lm)	Eff Flux(%)	Eff Sum(%)
38.0	147.649	9.968	462.812	1.755%	89.154%
39.0	131.414	9.069	471.881	1.597%	90.901%
40.0	115.671	8.153	480.035	1.435%	92.471%
41.0	98.852	7.112	487.146	1.252%	93.841%
42.0	80.430	5.902	493.048	1.039%	94.978%
43.0	63.661	4.761	497.809	.838%	95.895%
44.0	48.030	3.659	501.468	.644%	96.600%
45.0	33.188	2.573	504.042	.453%	97.096%
46.0	20.897	1.648	505.69	.290%	97.414%
47.0	12.030	0.965	506.655	.170%	97.599%
48.0	7.692	0.627	507.282	.110%	97.720%
49.0	6.258	0.518	507.8	.091%	97.820%
50.0	5.505	0.462	508.262	.081%	97.909%
51.0	5.013	0.427	508.689	.075%	97.991%
52.0	4.542	0.393	509.082	.069%	98.067%
53.0	4.191	0.367	509.449	.065%	98.138%
54.0	3.909	0.347	509.796	.061%	98.204%
55.0	3.691	0.332	510.127	.058%	98.268%
56.0	3.523	0.320	510.448	.056%	98.330%
57.0	3.410	0.314	510.761	.055%	98.390%
58.0	3.284	0.305	511.067	.054%	98.449%
59.0	3.185	0.299	511.366	.053%	98.507%
60.0	3.101	0.294	511.66	.052%	98.564%
61.0	3.002	0.288	511.948	.051%	98.619%
62.0	2.925	0.283	512.232	.050%	98.674%
63.0	2.869	0.280	512.512	.049%	98.728%
64.0	2.798	0.276	512.788	.049%	98.781%
65.0	2.763	0.275	513.062	.048%	98.834%
66.0	2.721	0.273	513.335	.048%	98.886%
67.0	2.658	0.268	513.603	.047%	98.938%
68.0	2.637	0.268	513.871	.047%	98.990%
69.0	2.602	0.266	514.138	.047%	99.041%
70.0	2.566	0.264	514.402	.047%	99.092%
71.0	2.510	0.260	514.662	.046%	99.142%
72.0	2.489	0.260	514.922	.046%	99.192%
73.0	2.461	0.258	515.18	.045%	99.242%
74.0	2.419	0.255	515.435	.045%	99.291%
75.0	2.391	0.253	515.688	.045%	99.340%

Zonal flux distribution table

γ(°)	Average I(cd)	Zonal F(lm)	Sum F(lm)	Eff Flux(%)	Eff Sum(%)
76.0	2.377	0.253	515.941	.045%	99.388%
77.0	2.348	0.251	516.192	.044%	99.437%
78.0	2.306	0.247	516.439	.044%	99.484%
79.0	2.271	0.244	516.684	.043%	99.531%
80.0	2.236	0.241	516.925	.043%	99.578%
81.0	2.236	0.242	517.168	.043%	99.625%
82.0	2.194	0.238	517.406	.042%	99.670%
83.0	2.166	0.236	517.642	.041%	99.716%
84.0	2.138	0.233	517.875	.041%	99.761%
85.0	2.123	0.232	518.107	.041%	99.805%
86.0	2.102	0.230	518.337	.040%	99.850%
87.0	2.067	0.226	518.563	.040%	99.893%
88.0	2.039	0.223	518.786	.039%	99.936%
89.0	2.011	0.220	519.007	.039%	99.979%
90.0	2.004	0.110	519.117	.019%	100.000%

Zonal flux distribution table

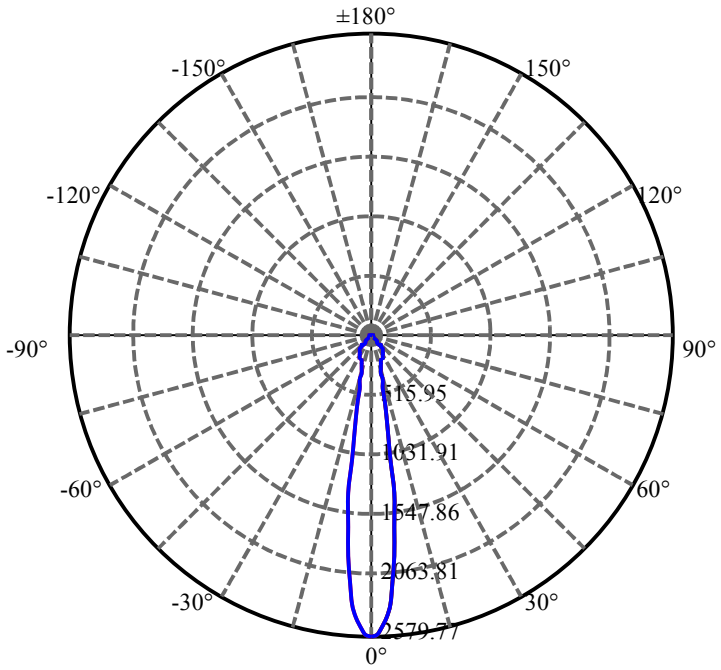
ZONAL LUMEN SUMMARY

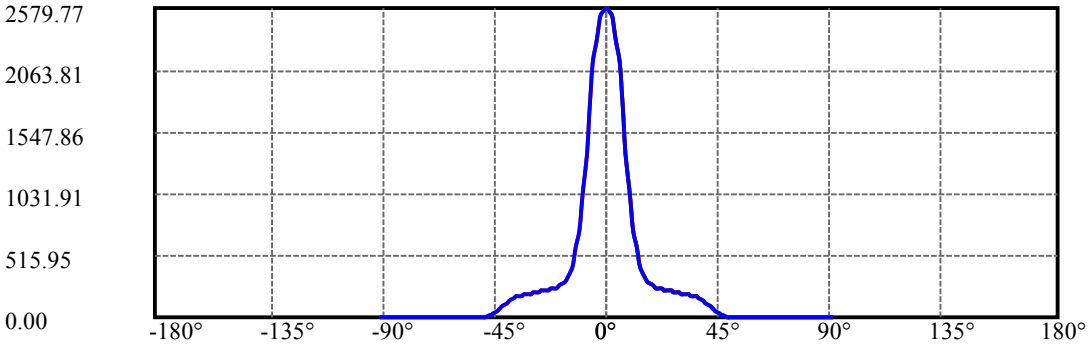
Zone	Lumens	%Lamp	%Fixt
0-30	376.17	66.23%	72.46%
0-40	480.03	84.51%	92.47%
0-60	511.66	90.08%	98.56%
0-90	519.01	91.37%	99.98%
0-120	519.01	91.37%	99.98%
0-180	519.12	91.39%	100.00%
60-90	7.64	1.35%	1.47%
90-120	0.00	0.00%	0.00%
90-130	0.00	0.00%	0.00%
90-150	0.00	0.00%	0.00%
90-180	0.00	0.00%	0.00%
0-33.54	415.29	73.12%	80.00%

ZONAL LUMEN SUMMARY

0-10	167.44
10-20	105.79
20-30	102.94
30-40	103.87
40-50	28.23
50-60	3.40
60-70	2.74
70-80	2.52
80-90	2.08
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):

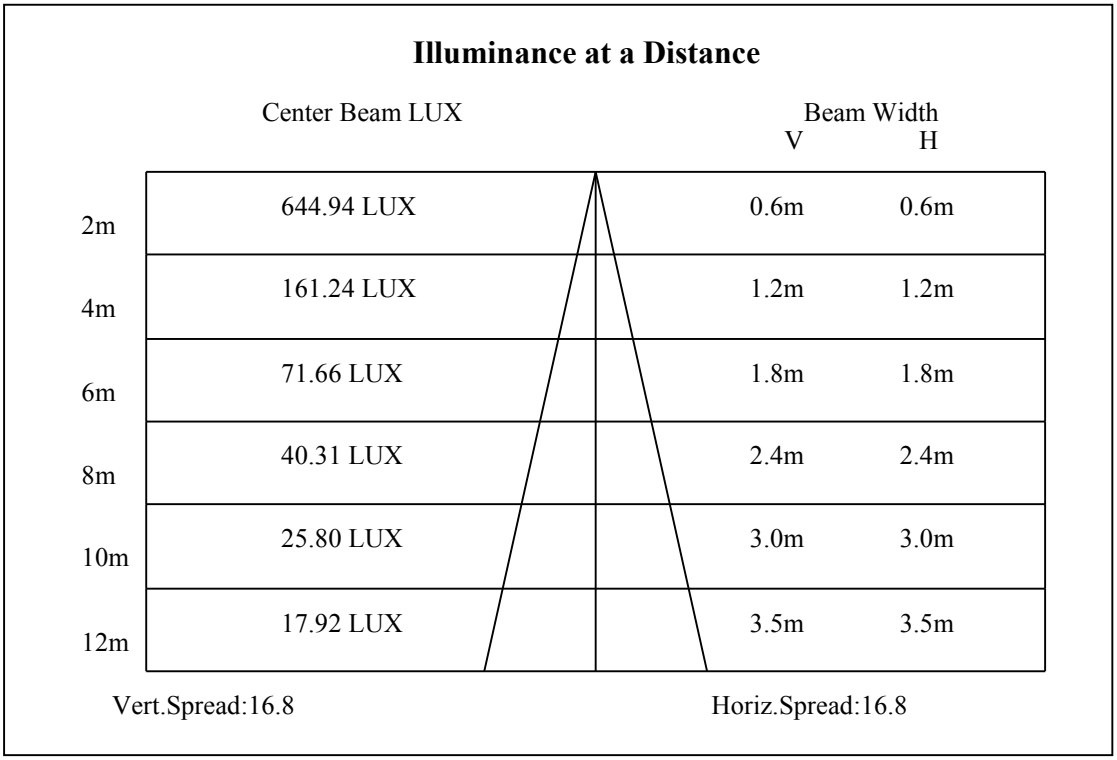
C0/C180:

C90/C270:

Field angle(10%Imax):C0/180Left:18.8 Right:18.8
:C90/270Left:18.8 Right:18.8

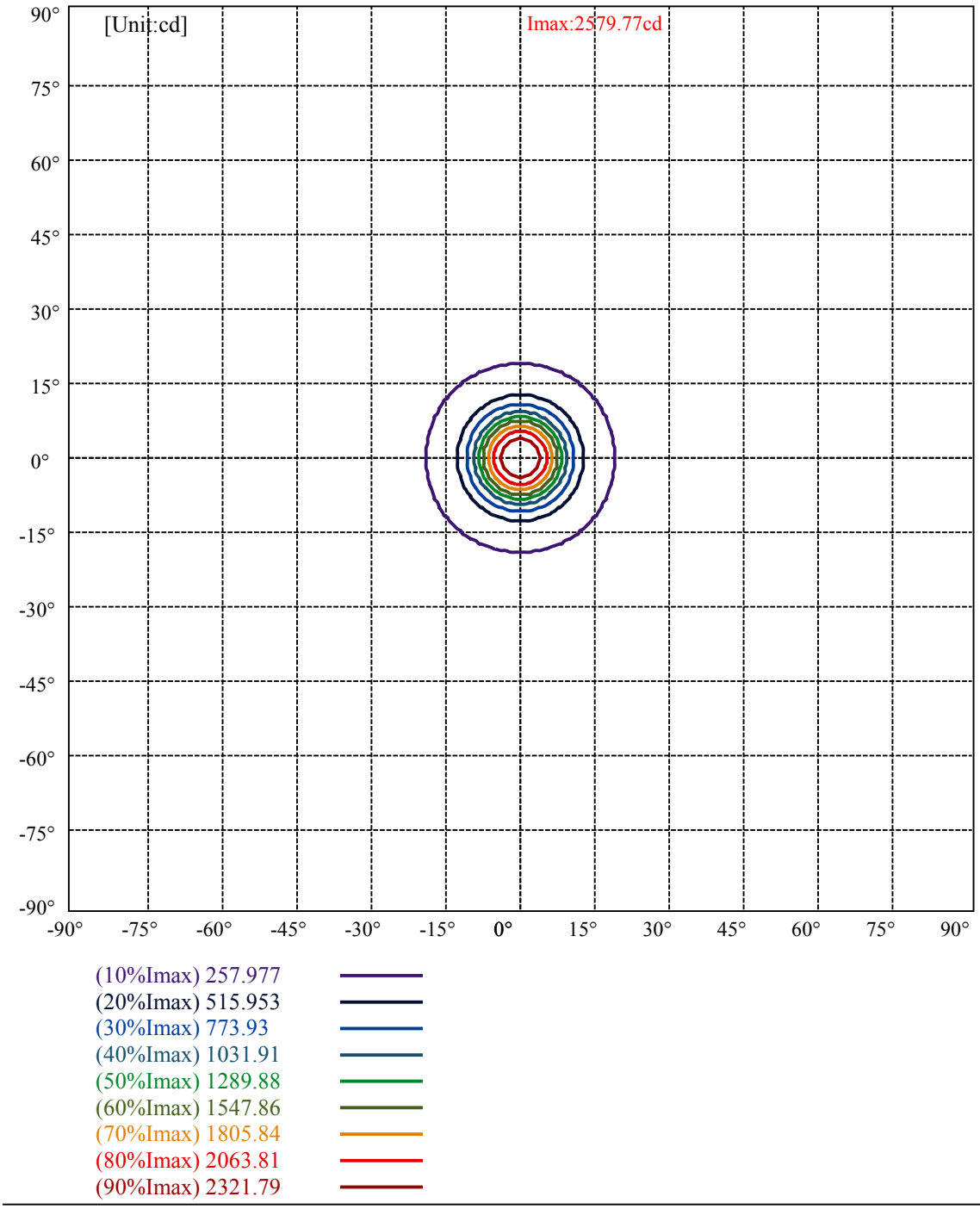
Beam Angle(50%Imax):C0/180Left:8.3 Right:8.3
:C90/270Left:8.3 Right:8.3

Lux distance Curve



Equipment: GMS1980 Date: 2019/1/9 Operator: NT07
Temperature(°C): 10.0 Humidity(%): 65.0% Distance(m): 7.50

ISO-Intensity(V-H)

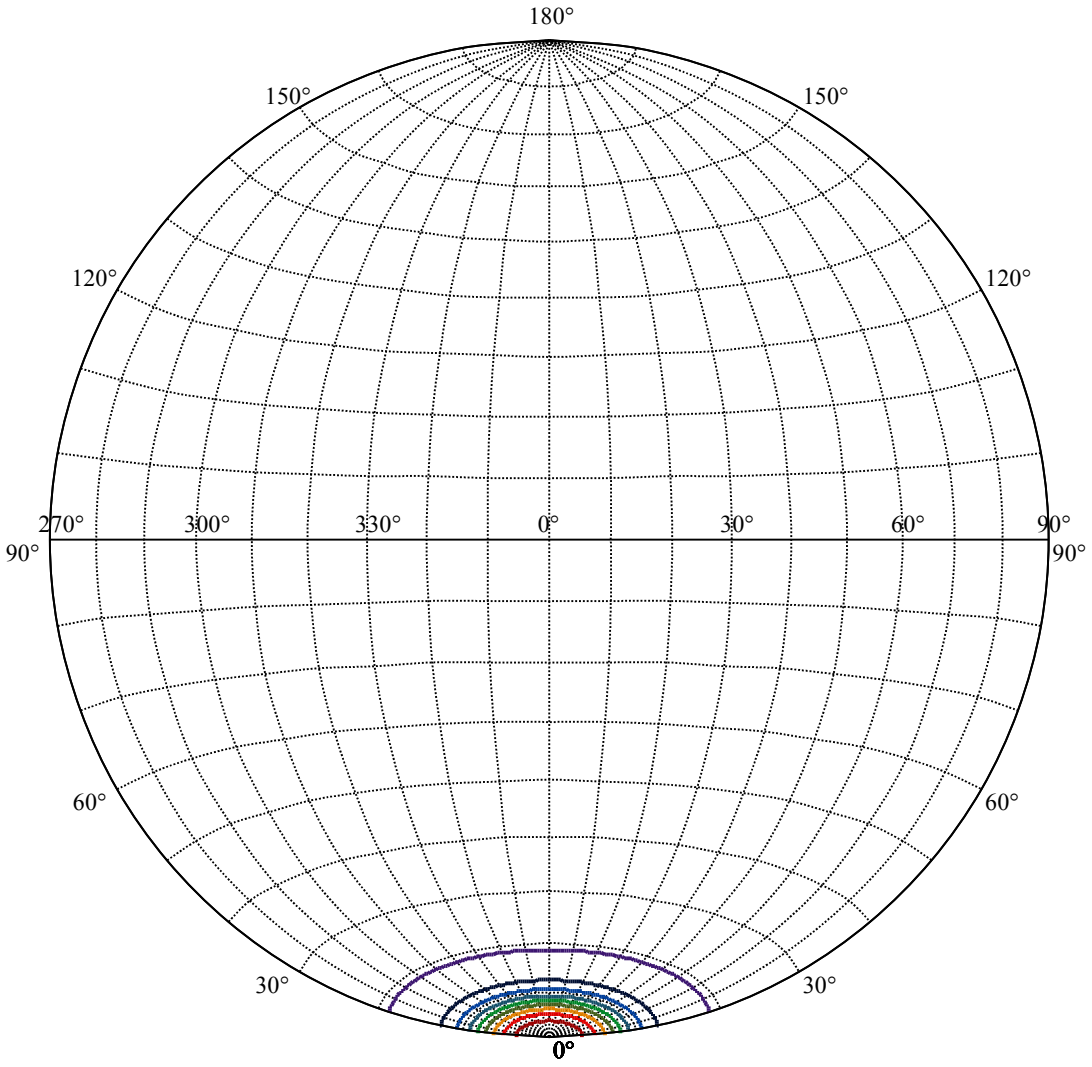


Equipment: GMS1980
Temperature(°C): 10.0

Date: 2019/1/9
Humidity(%): 65.0%

Operator: NT07
Distance(m): 7.50

ISO candela diagram on circular web



House [Unit:cd] Road

Imax:2579.77

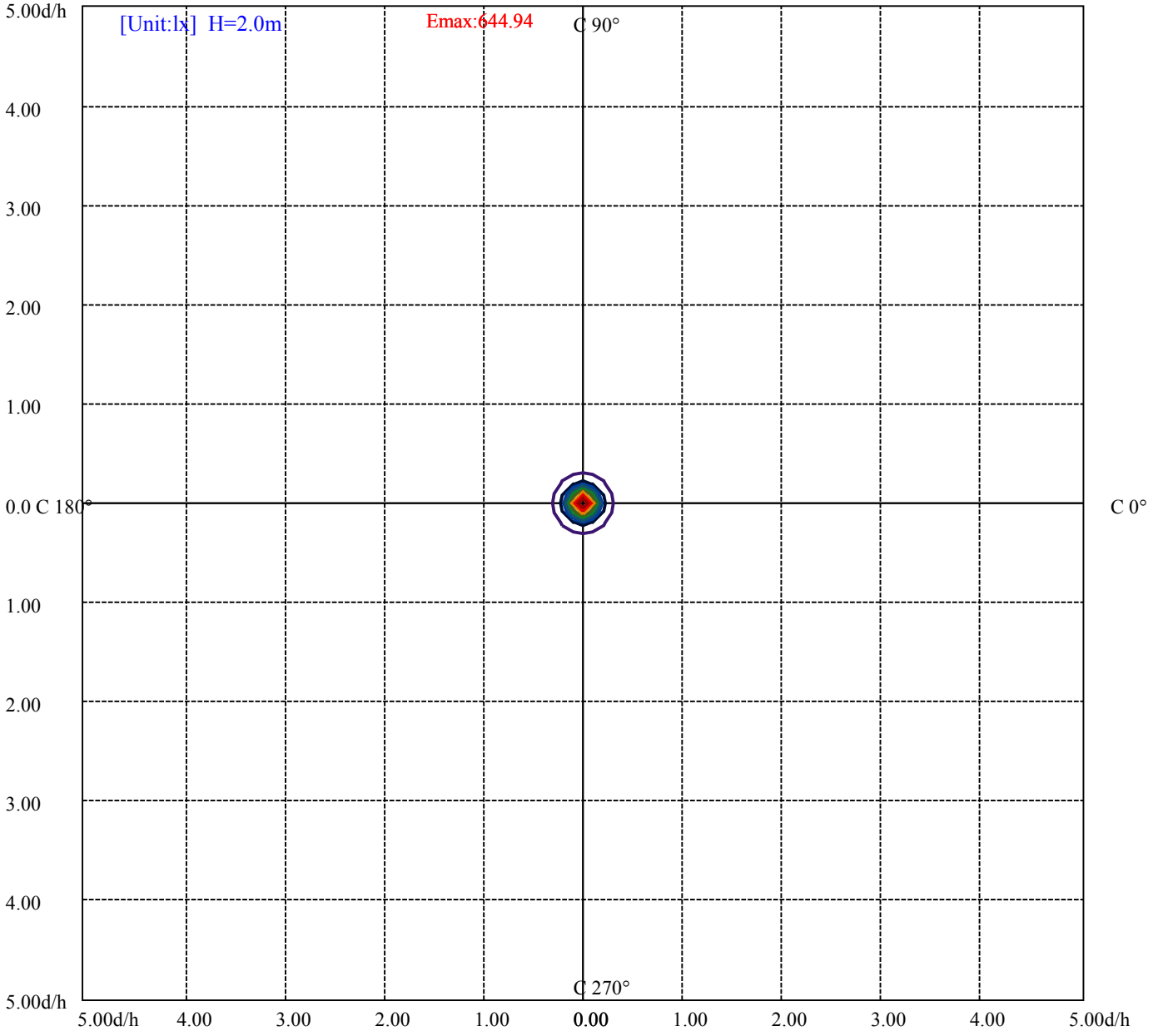
(10%Imax) 257.977
(20%Imax) 515.953
(30%Imax) 773.93
(40%Imax) 1031.91
(50%Imax) 1289.88
(60%Imax) 1547.86
(70%Imax) 1805.84
(80%Imax) 2063.81
(90%Imax) 2321.79

Equipment: GMS1980
Temperature(°C): 10.0

Date: 2019/1/9
Humidity(%): 65.0%

Operator: NT07
Distance(m): 7.50

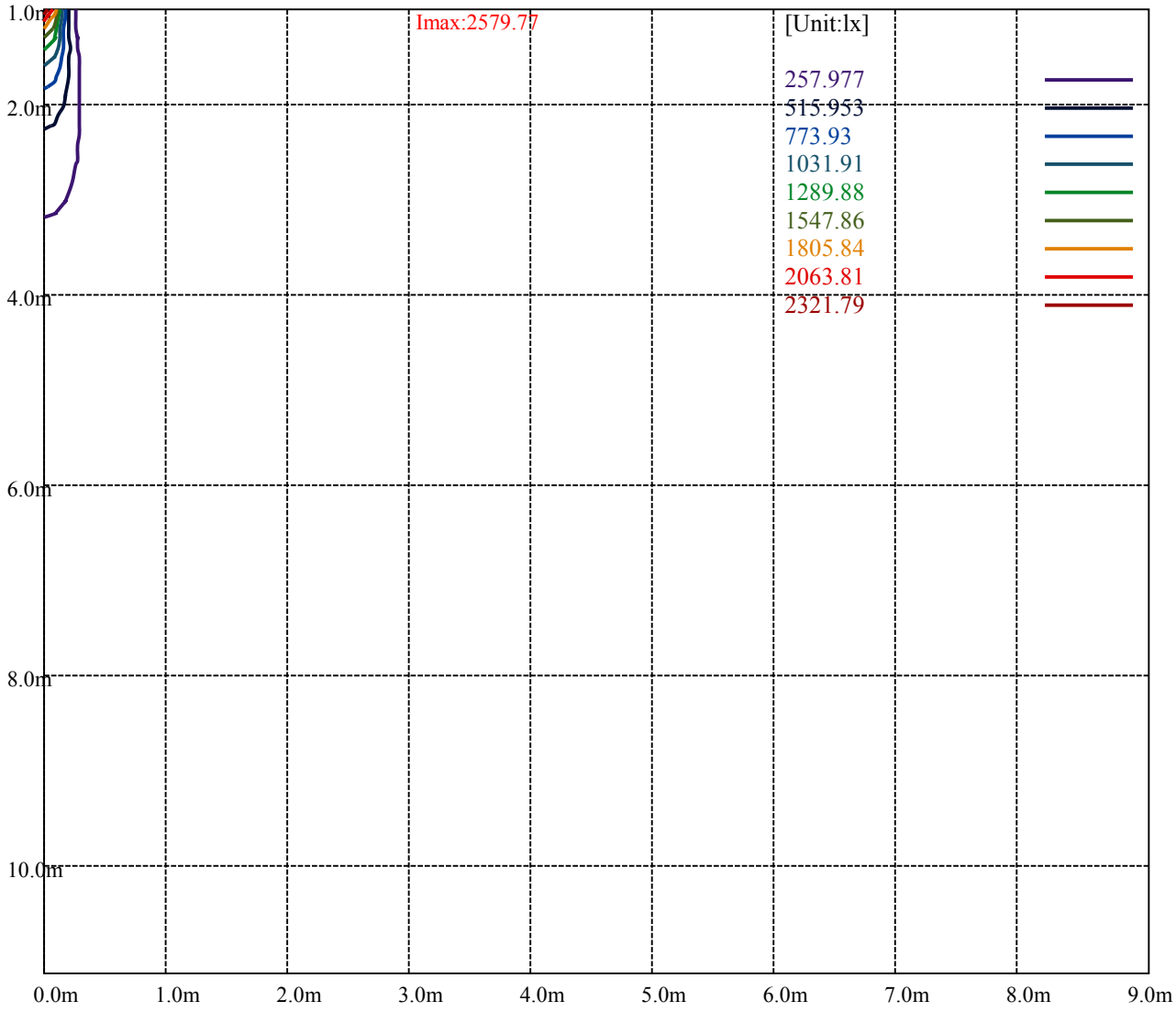
ISO illuminance diagram



(10%Emax) 64.494
(20%Emax) 128.9883
(30%Emax) 193.4823
(40%Emax) 257.9775
(50%Emax) 322.47
(60%Emax) 386.965
(70%Emax) 451.4575
(80%Emax) 515.9525
(90%Emax) 580.4475

Equipment: GMS1980
Temperature(°C): 10.0
Date: 2019/1/9
Humidity(%): 65.0%
Operator: NT07
Distance(m): 7.50

Space ISO Lux diagram



Equipment: GMS1980
Temperature(°C): 10.0

Date: 2019/1/9
Humidity(%): 65.0%

Operator: NT07
Distance(m): 7.50

Luminance Limitting Curve(no luminous side)

Luminance Table

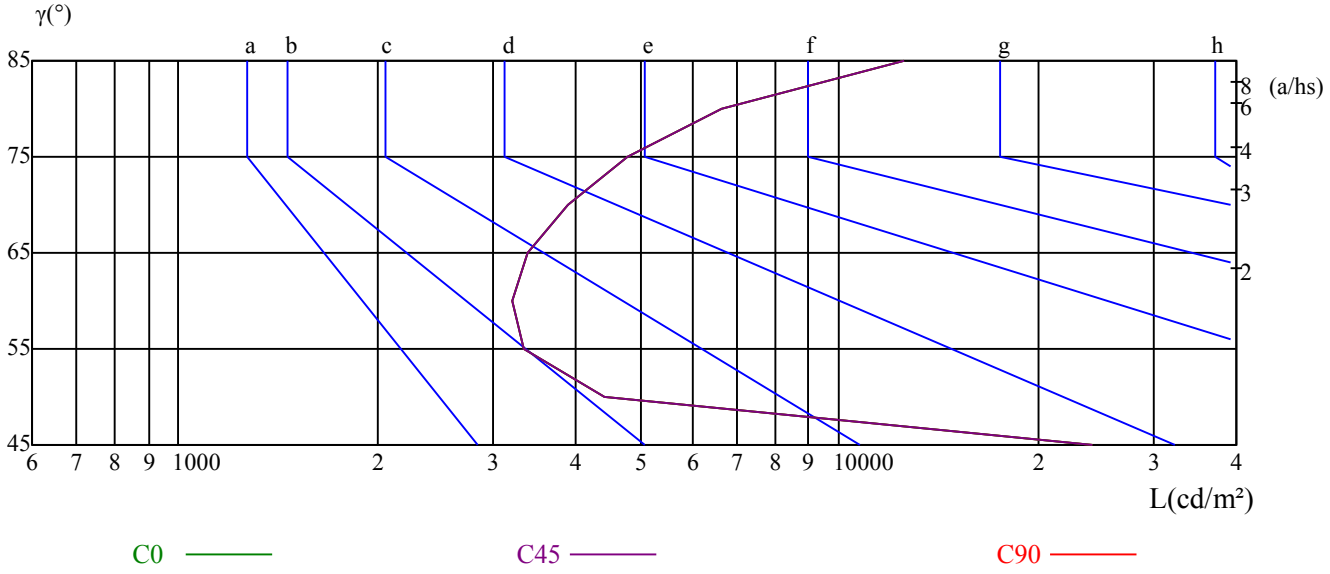
γ	45	50	55	60	65	70	75	80	85
C0	24243	4424	3324	3203	3377	3876	4771	6651	12585
C45	24243	4424	3324	3203	3377	3876	4771	6651	12585
C90	24243	4424	3324	3203	3377	3876	4771	6651	12585

L(Hor)(65)	L(Ver)(65)	L45(65)	L(Hor)(75)	L(Ver)(75)	L45(75)	L(Hor)(85)	L(Ver)(85)	L45(85)
3377	3377	3377	4771	4771	4771	12585	12585	12585

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): 10.0

Date: 2019/1/9
Humidity(%): 65.0%

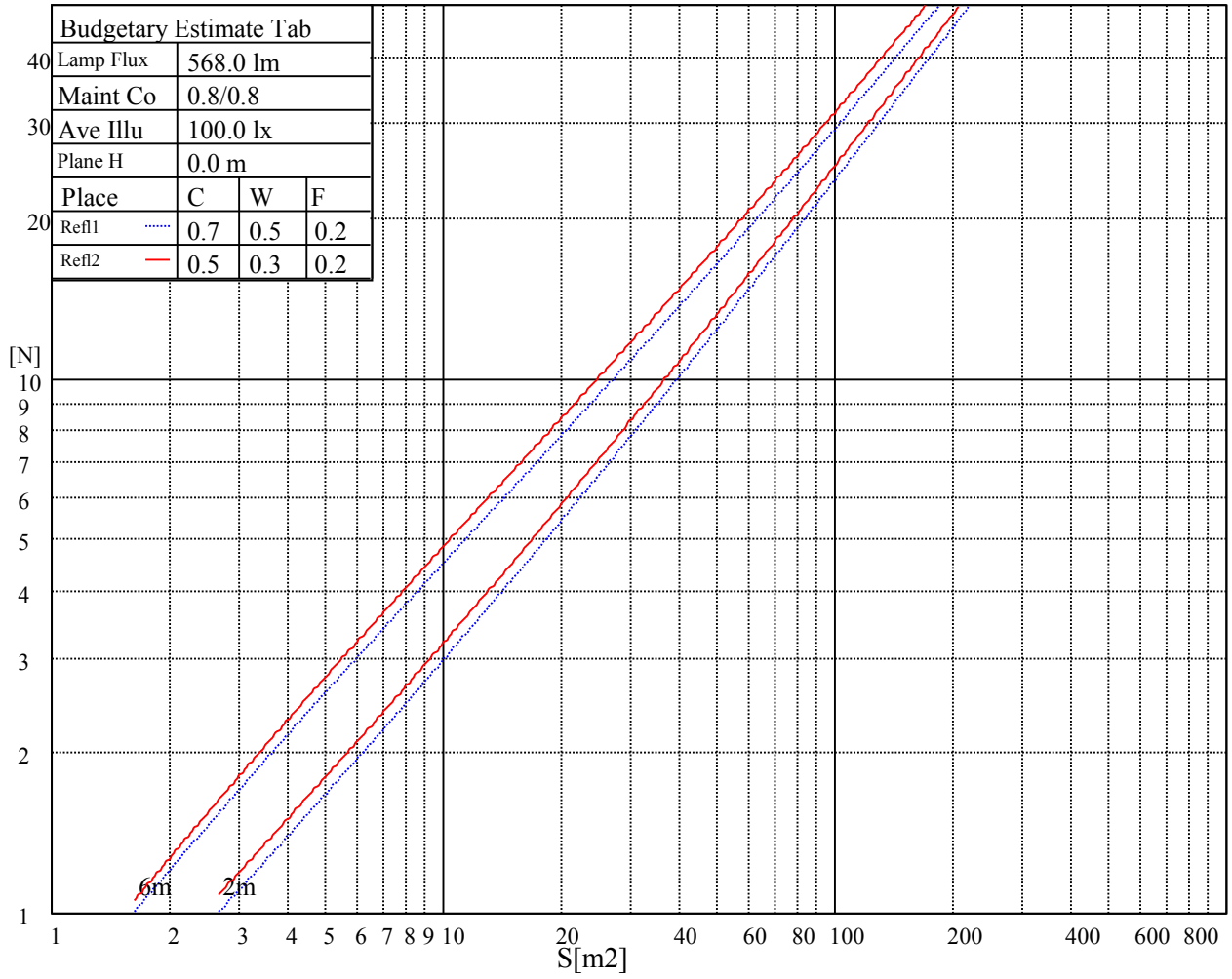
Operator: NT07
Distance(m): 7.50

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	9.17	10.14	9.53	10.45	10.76	7.33	8.30	7.69	8.61	8.93
	3H	11.46	12.32	11.84	12.65	13.02	10.03	10.88	10.41	11.22	11.58
	4H	12.80	13.59	13.20	13.94	14.33	11.50	12.29	11.91	12.64	13.03
	6H	14.31	15.04	14.73	15.41	15.81	13.17	13.89	13.59	14.27	14.66
	8H	15.16	15.84	15.60	16.23	16.64	14.11	14.79	14.55	15.18	15.59
	12H	16.58	17.23	17.01	17.61	18.04	15.70	16.35	16.13	16.73	17.16
4H	2H	9.55	10.34	9.95	10.69	11.08	8.12	8.91	8.53	9.26	9.66
	3H	12.20	12.85	12.62	13.26	13.66	11.11	11.75	11.52	12.16	12.57
	4H	13.76	14.34	14.20	14.77	15.22	12.76	13.33	13.20	13.76	14.21
	6H	15.44	15.93	15.91	16.38	16.86	14.57	15.07	15.05	15.52	15.99
	8H	16.44	16.90	16.92	17.35	17.83	15.63	16.09	16.11	16.54	17.02
	12H	17.86	18.26	18.35	18.75	19.22	17.15	17.54	17.64	18.03	18.51
8H	4H	14.24	14.70	14.71	15.15	15.62	13.43	13.89	13.91	14.34	14.82
	6H	16.21	16.57	16.72	17.08	17.56	15.53	15.89	16.04	16.40	16.88
	8H	17.41	17.73	17.94	18.26	18.75	16.77	17.10	17.31	17.62	18.12
	12H	19.05	19.33	19.57	19.83	20.41	18.46	18.74	18.98	19.24	19.82
12H	4H	14.36	14.76	14.85	15.25	15.72	13.62	14.02	14.11	14.50	14.98
	6H	16.69	16.76	16.97	17.23	17.78	16.08	16.15	16.36	16.62	17.17
	8H	17.76	18.04	18.28	18.54	19.12	17.20	17.48	17.72	17.98	18.56

Variation with the observer position at spacings:		
S = 1.0H	3.7/-9.2	3.7/-9.2
S = 1.5H	5.8/-7.4	5.8/-7.4
S = 2.0H	7.5/-6.1	7.5/-6.1
Standard tables:	BK1	BK1
Uncorrected UGR	2.0	2.0

Budgetary Estimate Table

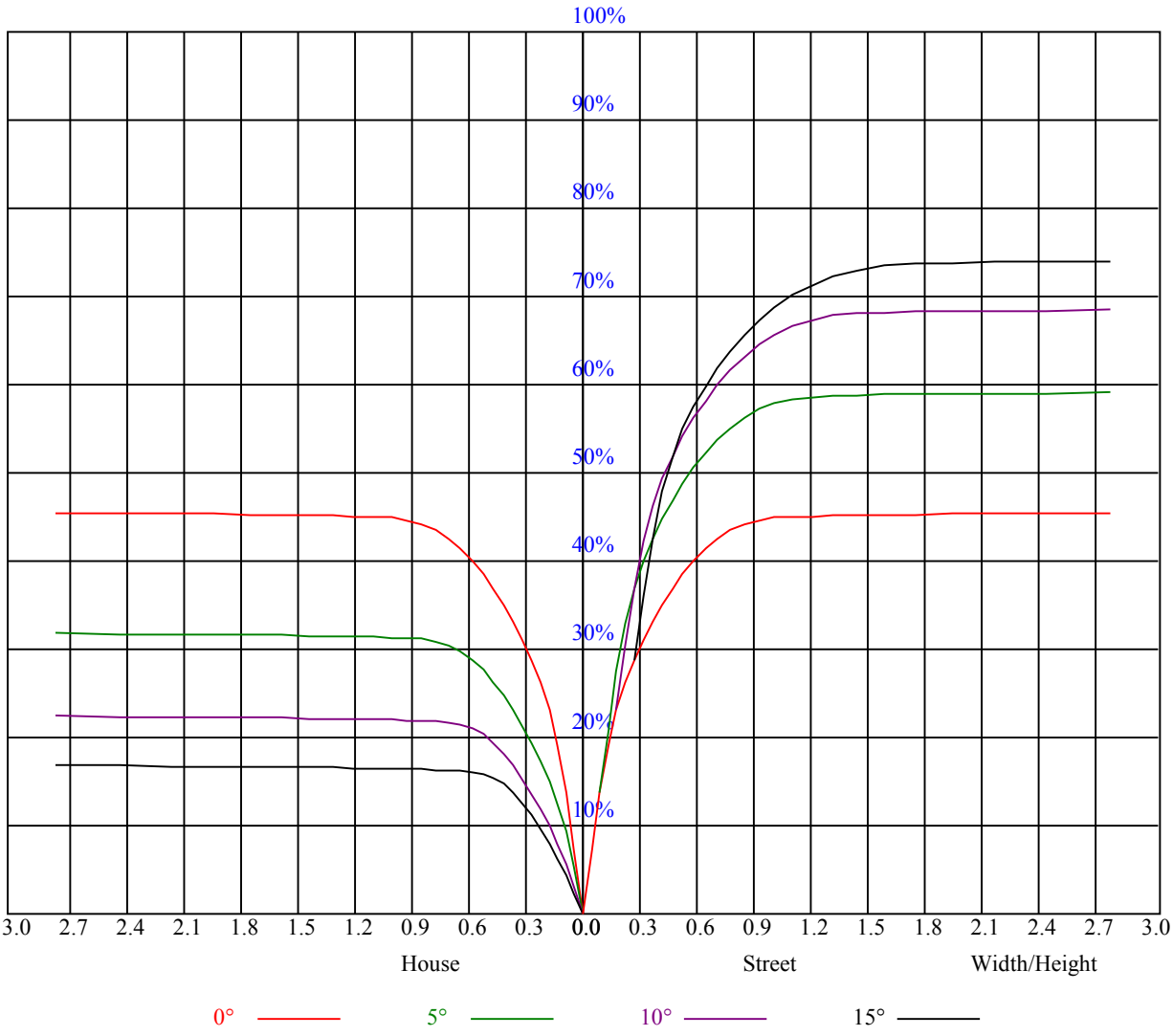


Equipment: GMS1980 Date: 2019/1/9 Operator: NT07
Temperature(°C): 10.0 Humidity(%): 65.0% Distance(m): 7.50

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	1.02	1.00	0.98	1.00	0.98	0.96	0.96	0.95	0.93	0.93	0.91	0.90	0.90	0.89	0.88	0.86
2	0.96	0.92	0.89	0.94	0.91	0.88	0.91	0.89	0.86	0.88	0.86	0.85	0.86	0.84	0.83	0.81
3	0.90	0.86	0.83	0.89	0.85	0.82	0.86	0.83	0.81	0.84	0.82	0.79	0.82	0.80	0.78	0.77
4	0.85	0.81	0.77	0.84	0.80	0.77	0.82	0.79	0.76	0.81	0.77	0.75	0.79	0.76	0.74	0.73
5	0.81	0.76	0.73	0.80	0.76	0.72	0.78	0.75	0.72	0.77	0.74	0.71	0.76	0.73	0.70	0.69
6	0.77	0.72	0.69	0.76	0.72	0.69	0.75	0.71	0.68	0.74	0.70	0.68	0.73	0.70	0.67	0.66
7	0.74	0.69	0.65	0.73	0.68	0.65	0.72	0.68	0.65	0.71	0.67	0.65	0.70	0.67	0.64	0.63
8	0.70	0.66	0.62	0.70	0.65	0.62	0.69	0.65	0.62	0.68	0.64	0.62	0.67	0.64	0.61	0.60
9	0.68	0.63	0.60	0.67	0.63	0.60	0.66	0.62	0.59	0.66	0.62	0.59	0.65	0.62	0.59	0.58
10	0.65	0.60	0.57	0.65	0.60	0.57	0.64	0.60	0.57	0.63	0.60	0.57	0.63	0.59	0.57	0.56

Coefficient Utilization Curve



Equipment: GMS1980	Date: 2019/1/9	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	2581.88	2553.75	2457.56	2323.69	2132.44	1900.69	1662.19	1415.25	1158.19
45.0	2585.25	2563.88	2493.00	2360.81	2202.75	1981.13	1709.44	1442.81	1190.25
90.0	2581.31	2571.19	2534.63	2444.06	2316.94	2118.94	1854.00	1579.50	1098.34
135.0	2570.63	2588.63	2587.50	2558.25	2511.00	2392.31	2219.63	1997.44	1699.88
180.0	2581.88	2584.13	2571.19	2521.13	2446.31	2332.13	2144.25	1890.00	1624.50
225.0	2585.25	2580.75	2554.31	2494.69	2397.94	2271.94	2102.63	1831.50	1581.19
270.0	2581.31	2568.38	2523.38	2436.75	2325.38	2159.44	1947.94	1724.63	1483.88
315.0	2570.63	2521.13	2383.88	2263.50	2099.25	1877.63	1618.31	1379.81	1104.64
360.0	2581.88	2553.75	2457.56	2323.69	2132.44	1900.69	1662.19	1415.25	1158.19

C/γ(°)	9.0	10.0	11.0	12.0	13.0	14.0	15.0	16.0	17.0
0.0	943.31	764.44	634.50	532.69	438.19	383.63	343.13	308.25	288.00
45.0	925.88	753.19	615.38	488.81	414.56	360.56	317.25	288.00	285.75
90.0	1008.73	802.91	610.71	496.46	411.13	337.33	297.73	270.34	250.88
135.0	1409.63	1091.25	827.44	649.13	515.25	399.94	342.00	306.00	285.75
180.0	1097.38	1006.20	795.32	618.47	499.78	405.06	343.74	309.26	287.33
225.0	1112.57	1000.97	827.38	667.86	532.91	436.95	375.81	325.86	292.22
270.0	1194.19	987.19	808.88	648.56	529.31	449.44	381.94	333.56	303.19
315.0	916.76	755.44	623.70	512.33	432.28	379.74	335.93	307.29	283.50
360.0	943.31	764.44	634.50	532.69	438.19	383.63	343.13	308.25	288.00

C/γ(°)	18.0	19.0	20.0	21.0	22.0	23.0	24.0	25.0	26.0
0.0	284.06	259.65	248.68	242.55	238.50	233.38	228.21	222.98	217.07
45.0	259.82	254.31	249.02	244.46	239.96	234.68	229.39	224.72	219.49
90.0	241.54	236.36	231.69	228.38	225.06	220.95	217.13	210.94	203.74
135.0	261.28	250.71	242.66	236.14	230.40	225.68	220.56	217.86	214.88
180.0	268.88	259.59	253.63	247.84	243.79	239.74	235.35	231.64	228.77
225.0	272.59	258.58	250.03	242.55	236.93	232.54	228.49	223.14	219.26
270.0	284.06	263.53	251.44	241.93	235.74	230.34	225.39	220.78	216.79
315.0	267.98	257.68	249.36	242.94	238.44	233.94	228.54	224.10	219.99
360.0	284.06	259.65	248.68	242.55	238.50	233.38	228.21	222.98	217.07

C/γ(°)	27.0	28.0	29.0	30.0	31.0	32.0	33.0	34.0	35.0
0.0	211.56	207.23	202.22	197.94	193.22	188.72	184.61	179.10	173.53
45.0	213.02	208.01	203.01	198.06	192.60	187.93	182.42	178.03	171.23
90.0	198.39	194.01	188.21	183.77	178.82	172.86	168.13	163.18	156.49
135.0	210.94	206.16	202.22	198.56	194.79	189.96	185.96	182.03	177.58
180.0	225.00	219.94	214.31	208.07	202.89	197.10	191.36	186.58	181.97
225.0	215.10	211.33	206.78	203.40	199.80	196.65	193.78	190.69	187.31
270.0	211.22	207.28	203.57	198.96	195.36	192.21	188.72	183.32	176.85
315.0	214.43	210.71	207.11	202.56	197.78	193.67	188.89	183.26	177.64
360.0	211.56	207.23	202.22	197.94	193.22	188.72	184.61	179.10	173.53

C/γ(°)	36.0	37.0	38.0	39.0	40.0	41.0	42.0	43.0	44.0
0.0	168.98	160.09	144.68	129.43	113.74	95.68	77.85	61.99	44.55
45.0	164.98	154.07	139.73	123.81	108.11	91.63	71.04	54.96	39.77
90.0	146.64	135.96	122.12	107.49	93.49	77.46	63.45	48.26	34.76
135.0	172.52	167.63	154.69	139.05	123.24	104.57	88.20	70.76	53.89
180.0	174.60	168.19	155.98	137.03	120.21	103.16	82.58	67.22	52.76
225.0	181.86	177.81	167.57	151.03	132.81	115.71	98.44	77.12	60.64
270.0	167.29	157.89	146.25	131.91	117.96	102.99	83.03	66.83	51.86
315.0	172.29	163.18	150.19	131.57	115.82	99.62	78.86	62.16	46.01
360.0	168.98	160.09	144.68	129.43	113.74	95.68	77.85	61.99	44.55

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	28.13	15.47	6.58	4.28	3.99	3.43	3.38	3.32	3.26
45.0	24.41	12.60	6.81	5.74	5.51	5.01	4.78	4.39	3.94
90.0	24.69	16.99	11.98	10.18	8.89	7.43	6.58	5.85	5.29
135.0	39.71	25.48	13.89	6.86	5.12	4.61	4.28	3.83	3.60
180.0	37.46	25.14	13.33	5.51	4.05	3.88	3.60	3.38	3.21
225.0	45.00	30.66	16.20	8.10	4.73	4.28	3.88	3.66	3.49
270.0	36.68	25.26	19.35	15.30	12.54	10.74	9.23	7.82	6.98
315.0	29.42	15.58	8.10	5.57	5.23	4.67	4.39	4.11	3.77
360.0	28.13	15.47	6.58	4.28	3.99	3.43	3.38	3.32	3.26

C/γ(°)	54.0	55.0	56.0	57.0	58.0	59.0	60.0	61.0	62.0
0.0	3.15	3.09	3.04	3.04	2.93	2.93	2.87	2.81	2.70
45.0	3.60	3.32	3.15	3.04	2.93	2.93	2.87	2.81	2.81
90.0	4.89	4.61	4.33	4.16	3.94	3.71	3.60	3.43	3.26
135.0	3.43	3.32	3.21	3.15	3.09	3.04	2.93	2.81	2.81
180.0	3.15	3.09	3.04	2.98	2.87	2.87	2.76	2.76	2.70
225.0	3.32	3.21	3.09	3.04	2.98	2.87	2.87	2.76	2.70
270.0	6.24	5.68	5.23	4.89	4.61	4.28	4.11	3.88	3.66
315.0	3.49	3.21	3.09	2.98	2.93	2.87	2.81	2.76	2.76
360.0	3.15	3.09	3.04	3.04	2.93	2.93	2.87	2.81	2.70

C/γ(°)	63.0	64.0	65.0	66.0	67.0	68.0	69.0	70.0	71.0
0.0	2.64	2.64	2.59	2.59	2.48	2.48	2.42	2.42	2.36
45.0	2.76	2.76	2.64	2.64	2.59	2.53	2.53	2.48	2.42
90.0	3.15	3.09	3.09	2.98	2.93	2.93	2.87	2.81	2.76
135.0	2.76	2.64	2.64	2.64	2.59	2.53	2.53	2.48	2.42
180.0	2.64	2.59	2.53	2.53	2.48	2.42	2.36	2.36	2.31
225.0	2.70	2.64	2.64	2.59	2.53	2.53	2.48	2.42	2.42
270.0	3.54	3.38	3.32	3.21	3.09	3.09	3.04	2.98	2.93
315.0	2.76	2.64	2.64	2.59	2.59	2.59	2.59	2.59	2.48
360.0	2.64	2.64	2.59	2.59	2.48	2.48	2.42	2.42	2.36

C/γ(°)	72.0	73.0	74.0	75.0	76.0	77.0	78.0	79.0	80.0
0.0	2.36	2.36	2.31	2.31	2.31	2.25	2.14	2.14	2.14
45.0	2.42	2.42	2.36	2.31	2.36	2.31	2.31	2.25	2.25
90.0	2.70	2.70	2.64	2.64	2.59	2.59	2.53	2.48	2.42
135.0	2.36	2.31	2.31	2.25	2.25	2.25	2.19	2.19	2.14
180.0	2.31	2.31	2.25	2.19	2.19	2.19	2.19	2.14	2.14
225.0	2.42	2.36	2.31	2.31	2.25	2.19	2.19	2.19	2.14
270.0	2.87	2.81	2.76	2.76	2.70	2.64	2.59	2.53	2.48
315.0	2.48	2.42	2.42	2.36	2.36	2.36	2.31	2.25	2.19
360.0	2.36	2.36	2.31	2.31	2.31	2.25	2.14	2.14	2.14

C/γ(°)	81.0	82.0	83.0	84.0	85.0	86.0	87.0	88.0	89.0
0.0	2.14	2.08	2.08	2.08	2.08	2.03	2.03	1.97	2.03
45.0	2.19	2.14	2.14	2.08	2.08	2.08	2.08	2.03	1.97
90.0	2.42	2.36	2.25	2.25	2.25	2.19	2.08	2.03	1.97
135.0	2.19	2.14	2.14	2.08	2.08	2.08	2.08	2.08	2.03
180.0	2.14	2.14	2.08	2.08	2.08	2.08	2.03	2.03	2.08
225.0	2.14	2.08	2.14	2.08	2.08	2.08	2.08	2.08	2.03
270.0	2.48	2.48	2.42	2.36	2.25	2.19	2.14	2.08	2.03
315.0	2.19	2.14	2.08	2.08	2.08	2.08	2.03	2.03	1.97
360.0	2.14	2.08	2.08	2.08	2.08	2.03	2.03	1.97	2.03

Intensity data(cd)

C/γ(°)	90.0
0.0	1.97
45.0	1.97
90.0	1.97
135.0	2.03
180.0	2.08
225.0	2.08
270.0	1.97
315.0	1.97
360.0	1.97