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Nata

LumCAT: 1656-S
Luminaire: 92.70.123.00

Report No: NATA0100	Voltage(V): 37.2000
Test No: GC2018092613	Current(A): 0.2100
LampCAT: CITIZEN CLU7A2-1201C9	Power (W): 7.8120
Lamp flux(lm): 767.0	PF: 0.0000
Number of Lamps: 1	Ballast type: DC
Length(mm): 47	Width(mm): 47
Phm Type: C	Height(mm): 0

Photometric Results

Lumens(lm): 704.49
Efficiency(%): 91.85%
Lumens(lm)/Power(W): 90.50
Central intensity(cd): 10631.040
Maximum intensity(cd): 10631.040
Angle of maximum intensity: C=0.0 γ=0.0
Beam Angle(50%Imax): [C0/180]Total=10.2
[C90/270]Total=10.2
Field angle(10%Imax): [C0/180]Total=19.8
[C90/270]Total=19.8
Maximum s/h(1/2): C0_180=0.18 C90_270=0.18
Maximum s/h(1/4): C0_180=0.18 C90_270=0.18
Up flux rate of lamp(%): 0.00%
Down flux rate of lamp(%): 92.18%
Up flux rate of LUM(%): - -
Down flux rate of LUM(%): 100.00%
CIE Type : Direct lighting
Output flux ratio in π solid angle : 98.340%

Zonal flux distribution table

γ(°)	Average I(cd)	Zonal F(lm)	Sum F(lm)	Eff Flux(%)	Eff Sum(%)
0.0	10631.039	2.543	2.543	.332%	.361%
1.0	10340.438	19.790	22.333	2.580%	3.170%
2.0	9536.906	36.499	58.832	4.759%	8.351%
3.0	8302.641	47.651	106.483	6.213%	15.115%
4.0	6838.102	52.308	158.791	6.820%	22.540%
5.0	5438.602	51.980	210.771	6.777%	29.918%
6.0	4286.039	49.130	259.901	6.405%	36.892%
7.0	3001.465	40.112	300.013	5.230%	42.586%
8.0	2195.079	33.501	333.514	4.368%	47.341%
9.0	1599.511	27.439	360.953	3.577%	51.236%
10.0	1009.463	19.223	380.176	2.506%	53.965%
11.0	793.927	16.612	396.788	2.166%	56.323%
12.0	609.968	13.907	410.695	1.813%	58.297%
13.0	475.516	11.730	422.425	1.529%	59.962%
14.0	404.409	10.729	433.154	1.399%	61.485%
15.0	363.255	10.310	443.464	1.344%	62.948%
16.0	330.370	9.986	453.45	1.302%	64.366%
17.0	313.186	10.041	463.492	1.309%	65.791%
18.0	300.790	10.193	473.684	1.329%	67.238%
19.0	291.171	10.395	484.08	1.355%	68.714%
20.0	285.223	10.698	494.777	1.395%	70.232%
21.0	278.663	10.951	505.729	1.428%	71.787%
22.0	273.185	11.222	516.951	1.463%	73.380%
23.0	268.291	11.496	528.447	1.499%	75.011%
24.0	264.066	11.778	540.225	1.536%	76.683%
25.0	259.615	12.032	552.257	1.569%	78.391%
26.0	255.902	12.302	564.558	1.604%	80.137%
27.0	252.204	12.556	577.114	1.637%	81.920%
28.0	248.034	12.769	589.884	1.665%	83.732%
29.0	244.132	12.979	602.863	1.692%	85.575%
30.0	240.251	13.173	616.036	1.717%	87.444%
31.0	235.280	13.288	629.325	1.733%	89.331%
32.0	226.280	13.149	642.474	1.714%	91.197%
33.0	209.355	12.504	654.978	1.630%	92.972%
34.0	179.726	11.021	665.999	1.437%	94.537%
35.0	143.009	8.995	674.994	1.173%	95.813%
36.0	99.759	6.430	681.424	.838%	96.726%
37.0	59.013	3.895	685.319	.508%	97.279%

Zonal flux distribution table

γ(°)	Average I(cd)	Zonal F(lm)	Sum F(lm)	Eff Flux(%)	Eff Sum(%)
38.0	31.500	2.127	687.446	.277%	97.581%
39.0	13.563	0.936	688.382	.122%	97.714%
40.0	7.988	0.563	688.945	.073%	97.794%
41.0	6.863	0.494	689.438	.064%	97.864%
42.0	6.019	0.442	689.88	.058%	97.926%
43.0	5.063	0.379	690.259	.049%	97.980%
44.0	4.437	0.338	690.597	.044%	98.028%
45.0	3.980	0.309	690.905	.040%	98.072%
46.0	3.727	0.294	691.199	.038%	98.114%
47.0	3.607	0.289	691.488	.038%	98.155%
48.0	3.537	0.288	691.777	.038%	98.196%
49.0	3.480	0.288	692.065	.038%	98.236%
50.0	3.445	0.289	692.354	.038%	98.278%
51.0	3.396	0.289	692.643	.038%	98.319%
52.0	3.340	0.289	692.932	.038%	98.360%
53.0	3.312	0.290	693.222	.038%	98.401%
54.0	3.263	0.289	693.512	.038%	98.442%
55.0	3.248	0.292	693.803	.038%	98.483%
56.0	3.213	0.292	694.095	.038%	98.525%
57.0	3.178	0.292	694.388	.038%	98.566%
58.0	3.136	0.292	694.679	.038%	98.608%
59.0	3.143	0.295	694.975	.039%	98.650%
60.0	3.108	0.295	695.27	.038%	98.691%
61.0	3.094	0.297	695.567	.039%	98.734%
62.0	3.066	0.297	695.864	.039%	98.776%
63.0	3.059	0.299	696.162	.039%	98.818%
64.0	3.052	0.301	696.463	.039%	98.861%
65.0	3.052	0.303	696.766	.040%	98.904%
66.0	3.023	0.303	697.069	.039%	98.947%
67.0	3.016	0.304	697.374	.040%	98.990%
68.0	3.009	0.306	697.68	.040%	99.034%
69.0	3.009	0.308	697.988	.040%	99.077%
70.0	3.009	0.310	698.298	.040%	99.121%
71.0	2.981	0.309	698.607	.040%	99.165%
72.0	2.988	0.312	698.919	.041%	99.209%
73.0	2.974	0.312	699.231	.041%	99.254%
74.0	2.974	0.314	699.544	.041%	99.298%
75.0	2.967	0.314	699.859	.041%	99.343%

Zonal flux distribution table

γ(°)	Average I(cd)	Zonal F(lm)	Sum F(lm)	Eff Flux(%)	Eff Sum(%)
76.0	2.967	0.316	700.174	.041%	99.388%
77.0	2.960	0.316	700.491	.041%	99.432%
78.0	2.946	0.316	700.807	.041%	99.477%
79.0	2.946	0.317	701.124	.041%	99.522%
80.0	2.946	0.318	701.442	.041%	99.568%
81.0	2.946	0.319	701.761	.042%	99.613%
82.0	2.953	0.321	702.082	.042%	99.658%
83.0	2.953	0.321	702.403	.042%	99.704%
84.0	2.953	0.322	702.725	.042%	99.750%
85.0	2.953	0.323	703.048	.042%	99.795%
86.0	2.932	0.321	703.368	.042%	99.841%
87.0	2.918	0.320	703.688	.042%	99.886%
88.0	2.925	0.321	704.009	.042%	99.932%
89.0	2.918	0.320	704.329	.042%	99.977%
90.0	2.918	0.160	704.489	.021%	100.000%

Zonal flux distribution table

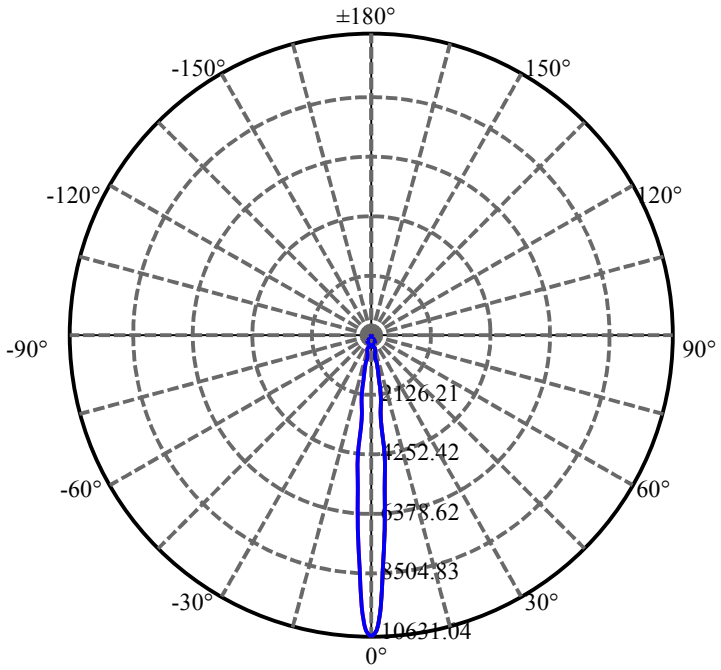
ZONAL LUMEN SUMMARY

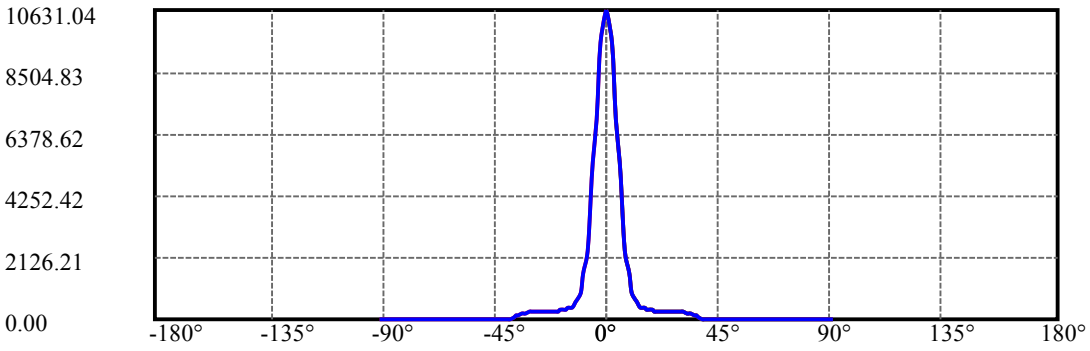
Zone	Lumens	%Lamp	%Fixt
0-30	616.04	80.32%	87.44%
0-40	688.94	89.82%	97.79%
0-60	695.27	90.65%	98.69%
0-90	704.33	91.83%	99.98%
0-120	704.33	91.83%	99.98%
0-180	704.49	91.85%	100.00%
60-90	9.35	1.22%	1.33%
90-120	0.00	0.00%	0.00%
90-130	0.00	0.00%	0.00%
90-150	0.00	0.00%	0.00%
90-180	0.00	0.00%	0.00%
0-25.92	563.59	73.48%	80.00%

ZONAL LUMEN SUMMARY

0-10	380.18
10-20	114.60
20-30	121.26
30-40	72.91
40-50	3.41
50-60	2.92
60-70	3.03
70-80	3.14
80-90	2.89
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):

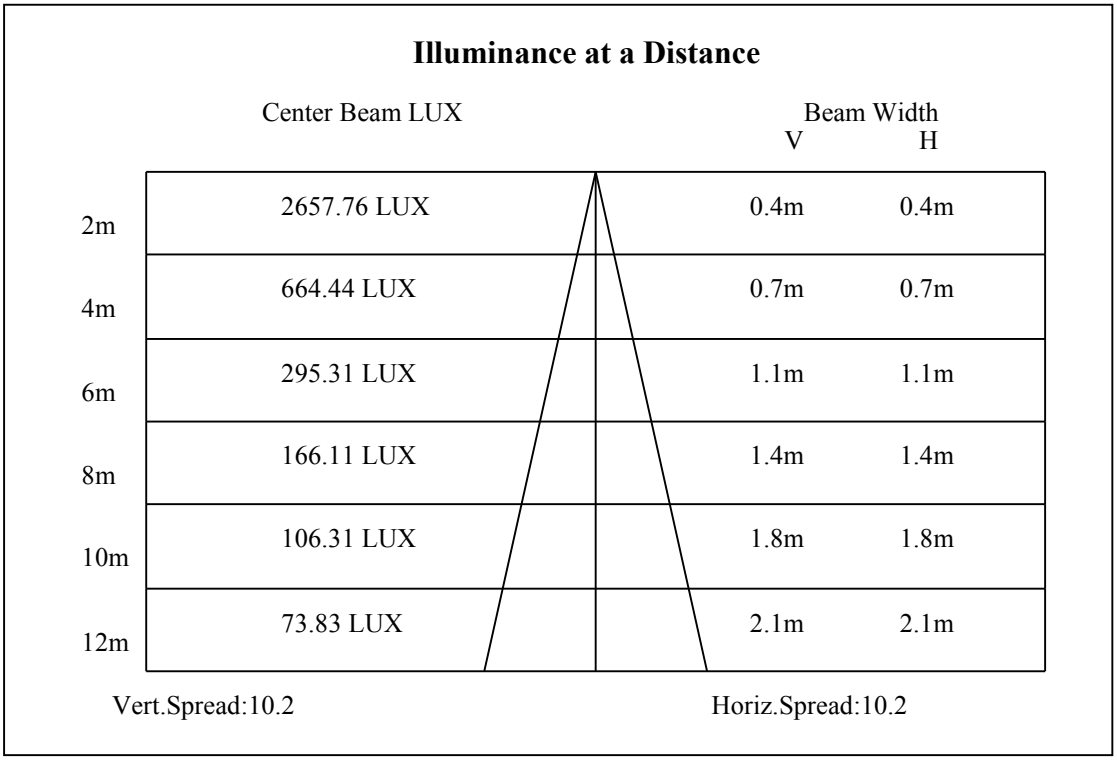
C0/C180:

C90/C270:

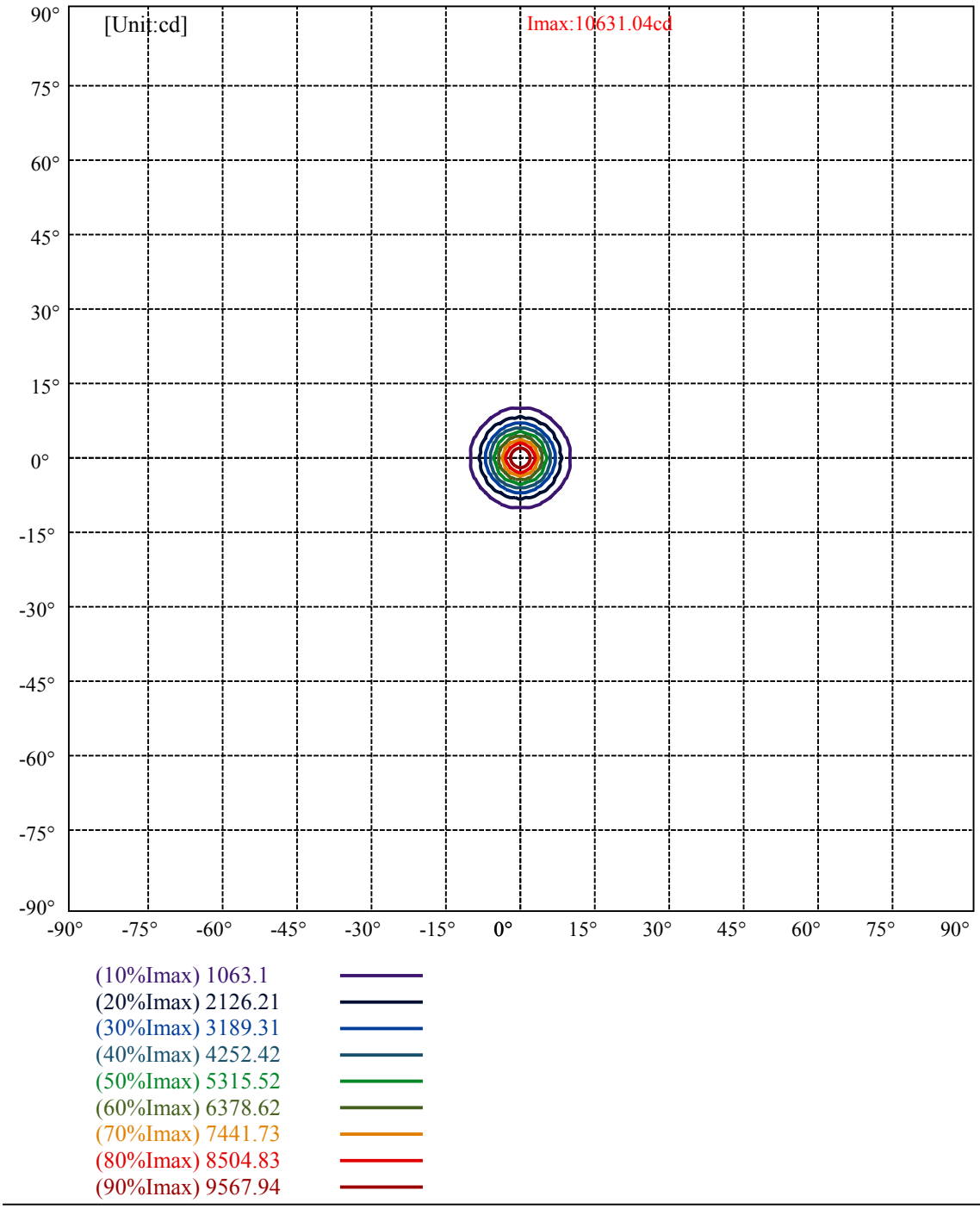
Field angle(10%Imax):C0/180Left:9.9 Right:9.9
:C90/270Left:9.9 Right:9.9

Beam Angle(50%Imax):C0/180Left:5.1 Right:5.1
:C90/270Left:5.1 Right:5.1

Lux distance Curve



ISO-Intensity(V-H)



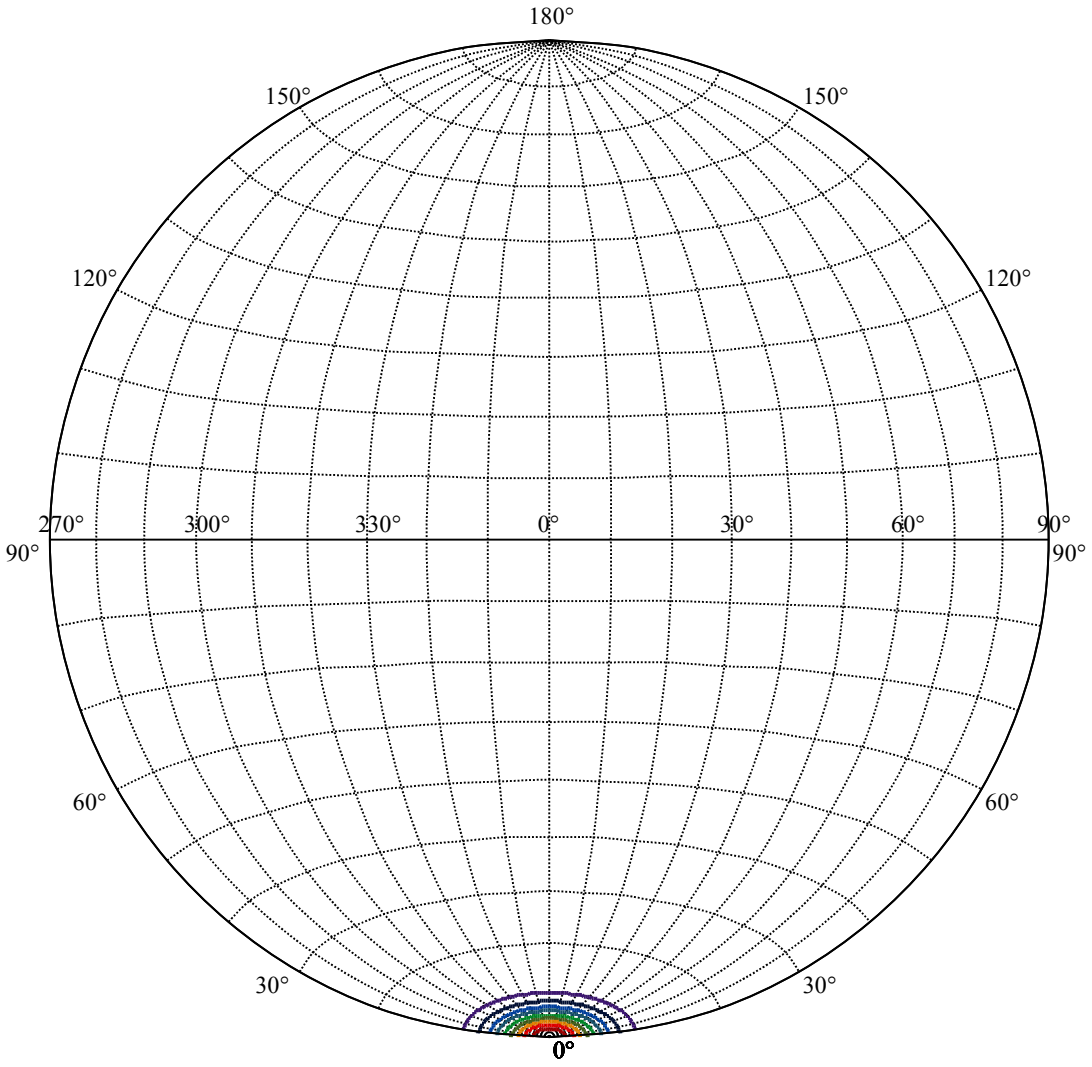
(10%Imax) 1063.1
(20%Imax) 2126.21
(30%Imax) 3189.31
(40%Imax) 4252.42
(50%Imax) 5315.52
(60%Imax) 6378.62
(70%Imax) 7441.73
(80%Imax) 8504.83
(90%Imax) 9567.94

Equipment: GMS1980
Temperature(°C): 25.0

Date: 2018/9/26
Humidity(%): 60.0%

Operator: NT07
Distance(m): 7.50

ISO candela diagram on circular web



House [Unit:cd] Road

Imax:10631.04

(10%Imax) 1063.1
(20%Imax) 2126.21
(30%Imax) 3189.31
(40%Imax) 4252.42
(50%Imax) 5315.52
(60%Imax) 6378.62
(70%Imax) 7441.73
(80%Imax) 8504.83
(90%Imax) 9567.94

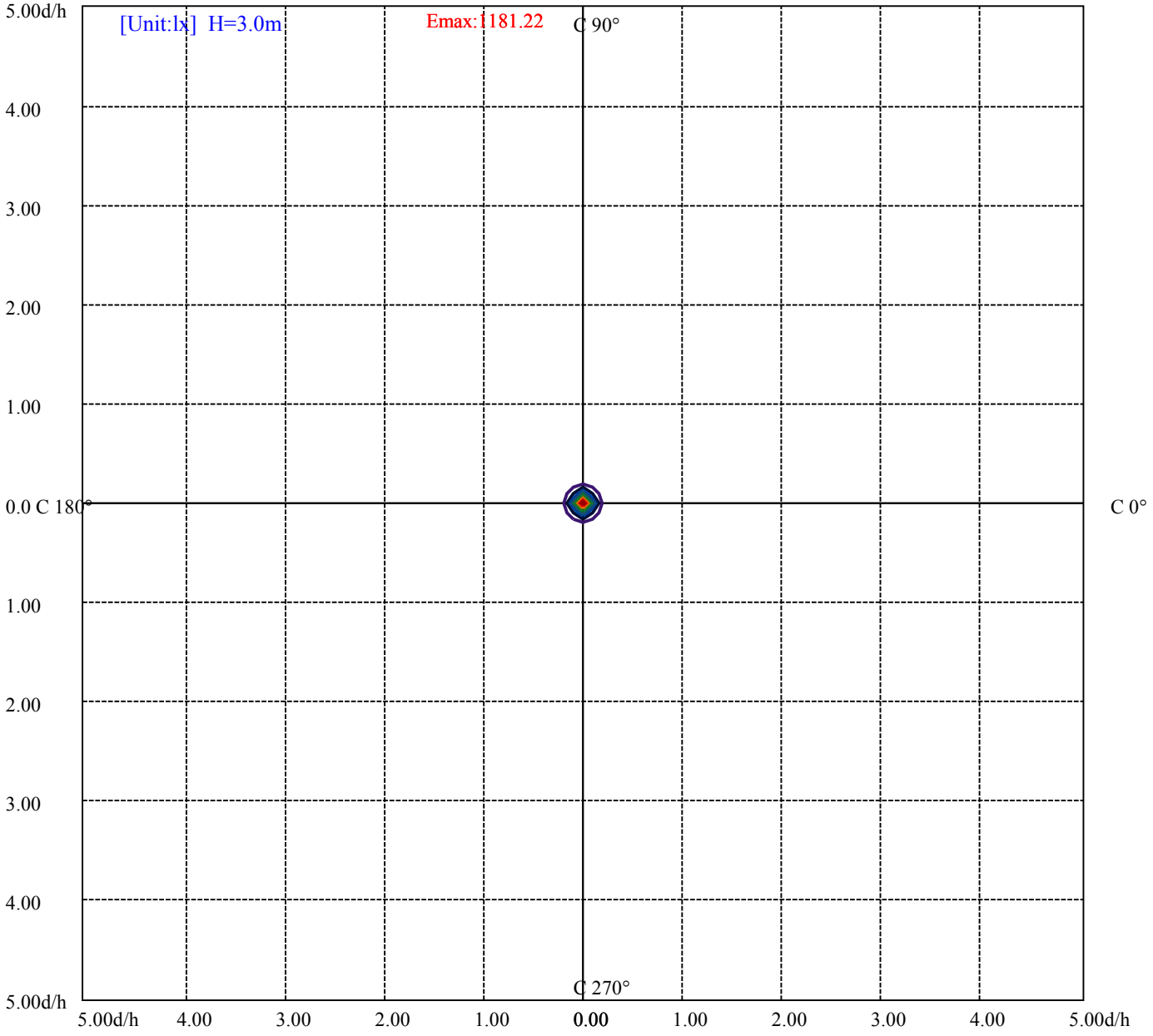
Equipment: GMS1980
Temperature(°C): 25.0

Date: 2018/9/26
Humidity(%): 60.0%

Operator: NT07
Distance(m): 7.50

Nata 1656-S

ISO illuminance diagram



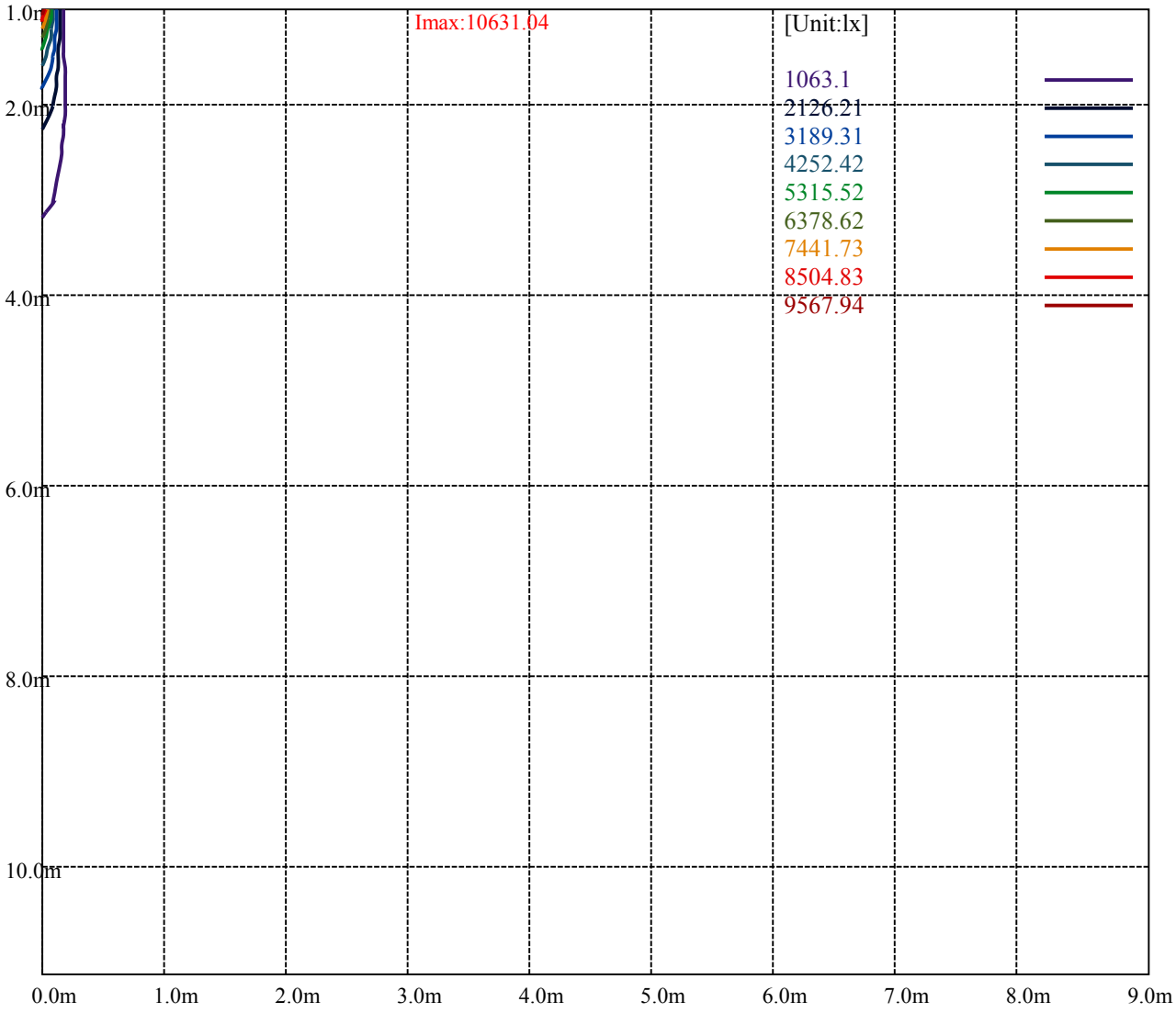
(10%Emax) 118.1222
(20%Emax) 236.2444
(30%Emax) 354.3667
(40%Emax) 472.4889
(50%Emax) 590.6111
(60%Emax) 708.7333
(70%Emax) 826.8556
(80%Emax) 944.9778
(90%Emax) 1063.1

Equipment: GMS1980
Temperature(°C): 25.0

Date: 2018/9/26
Humidity(%): 60.0%

Operator: NT07
Distance(m): 7.50

Space ISO Lux diagram



Equipment: GMS1980
Temperature(°C): 25.0

Date: 2018/9/26
Humidity(%): 60.0%

Operator: NT07
Distance(m): 7.50

Nata 1656-S

Luminance Limitting Curve(no luminous side)

Luminance Table

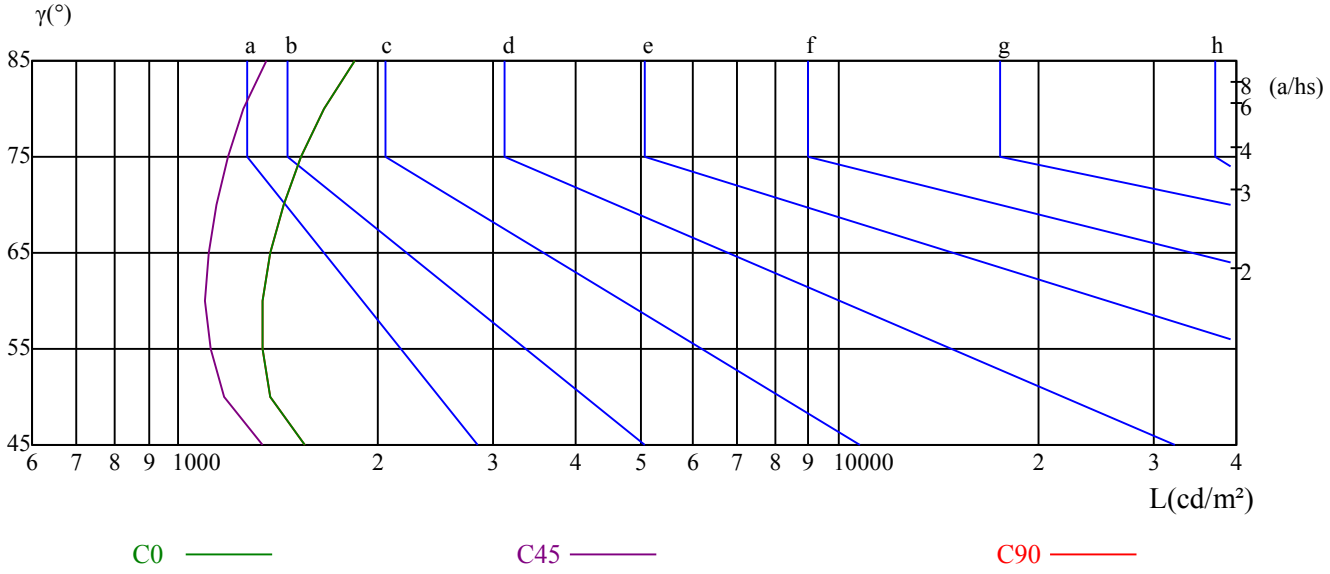
γ	45	50	55	60	65	70	75	80	85
C0	1555	1378	1341	1336	1380	1446	1534	1662	1849
C45	1339	1169	1120	1098	1113	1145	1188	1255	1355
C90	1555	1378	1341	1336	1380	1446	1534	1662	1849

L(Hor)(65)	L(Ver)(65)	L45(65)	L(Hor)(75)	L(Ver)(75)	L45(75)	L(Hor)(85)	L(Ver)(85)	L45(85)
3269	3269	3269	5190	5190	5190	15339	15339	15339

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

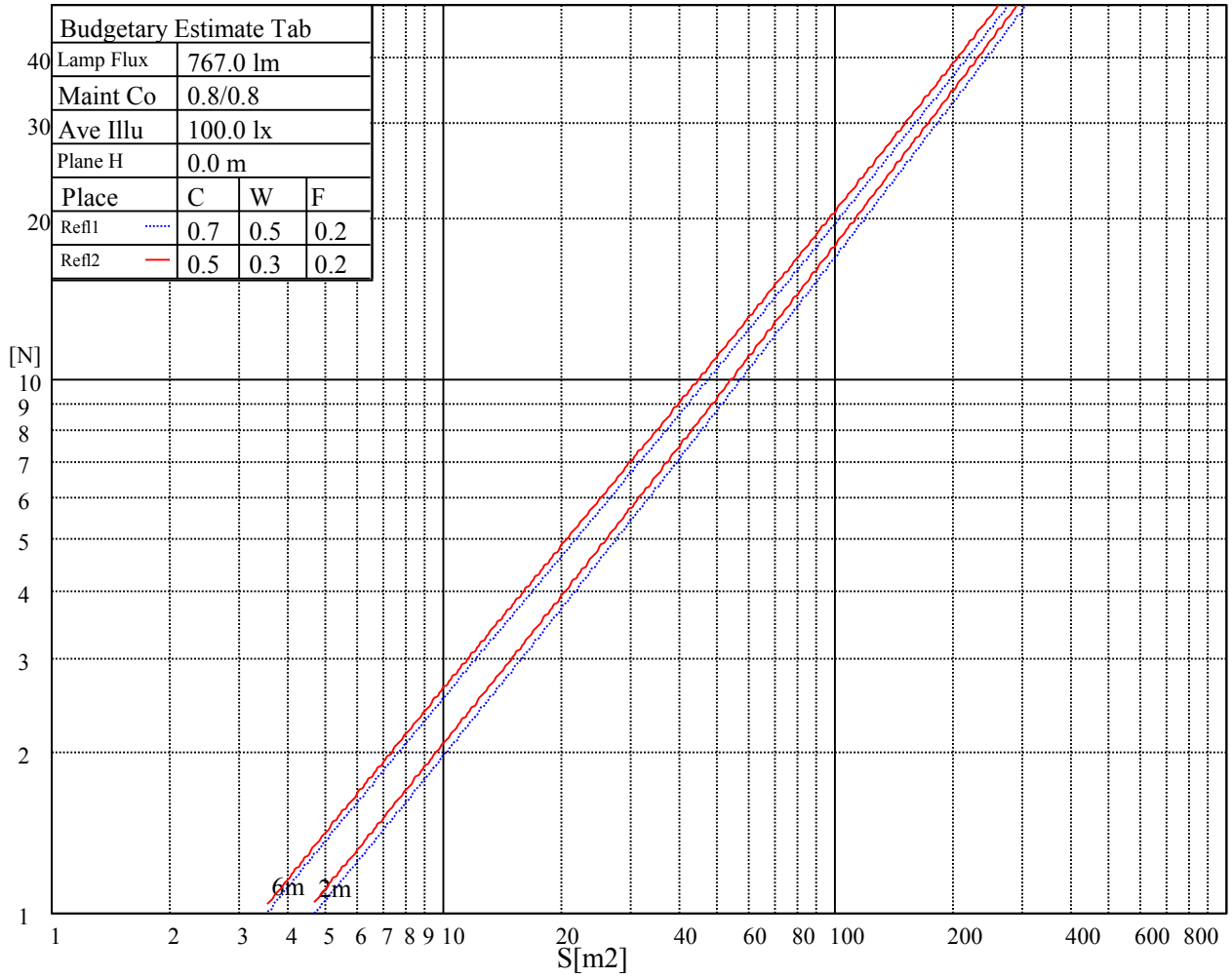
Date: 2018/9/26
Humidity(%): 60.0%

Operator: NT07
Distance(m): 7.50

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	3.23	4.14	3.60	4.45	4.77	3.20	4.10	3.56	4.41	4.73
	3H	5.57	6.37	5.95	6.70	7.07	5.51	6.31	5.89	6.64	7.01
	4H	6.85	7.58	7.25	7.94	8.33	6.77	7.51	7.18	7.86	8.25
	6H	8.18	8.85	8.60	9.23	9.63	8.09	8.76	8.51	9.14	9.54
	8H	8.86	9.49	9.29	9.88	10.29	8.75	9.38	9.19	9.78	10.19
	12H	9.91	10.51	10.35	10.90	11.33	9.77	10.38	10.21	10.76	11.19
4H	2H	3.73	4.47	4.14	4.82	5.22	3.70	4.44	4.11	4.79	5.19
	3H	6.36	6.97	6.78	7.38	7.78	6.31	6.91	6.73	7.32	7.73
	4H	7.81	8.35	8.24	8.77	9.22	7.74	8.28	8.17	8.70	9.15
	6H	9.24	9.70	9.71	10.15	10.63	9.16	9.62	9.63	10.07	10.55
	8H	10.03	10.46	10.50	10.91	11.38	9.93	10.36	10.41	10.81	11.29
	12H	11.08	11.44	11.57	11.93	12.41	10.94	11.31	11.44	11.80	12.28
8H	4H	8.24	8.67	8.71	9.12	9.59	8.18	8.61	8.66	9.06	9.54
	6H	9.91	10.24	10.42	10.75	11.24	9.84	10.18	10.35	10.68	11.17
	8H	10.85	11.15	11.39	11.67	12.17	10.76	11.06	11.30	11.59	12.08
	12H	12.03	12.29	12.56	12.79	13.37	11.91	12.16	12.43	12.66	13.25
12H	4H	8.32	8.69	8.82	9.18	9.66	8.27	8.64	8.76	9.13	9.61
	6H	10.26	10.37	10.61	10.85	11.40	10.20	10.31	10.55	10.78	11.33
	8H	11.11	11.37	11.64	11.87	12.45	11.03	11.29	11.56	11.79	12.37

Variation with the observer position at spacings:		
S = 1.0H	6.2/-8.3	6.2/-8.3
S = 1.5H	8.6/-6.4	8.6/-6.4
S = 2.0H	10.2/-5.1	10.2/-5.1
Standard tables:	BK1	BK1
Uncorrected UGR	-3.9	-3.9

Budgetary Estimate Table

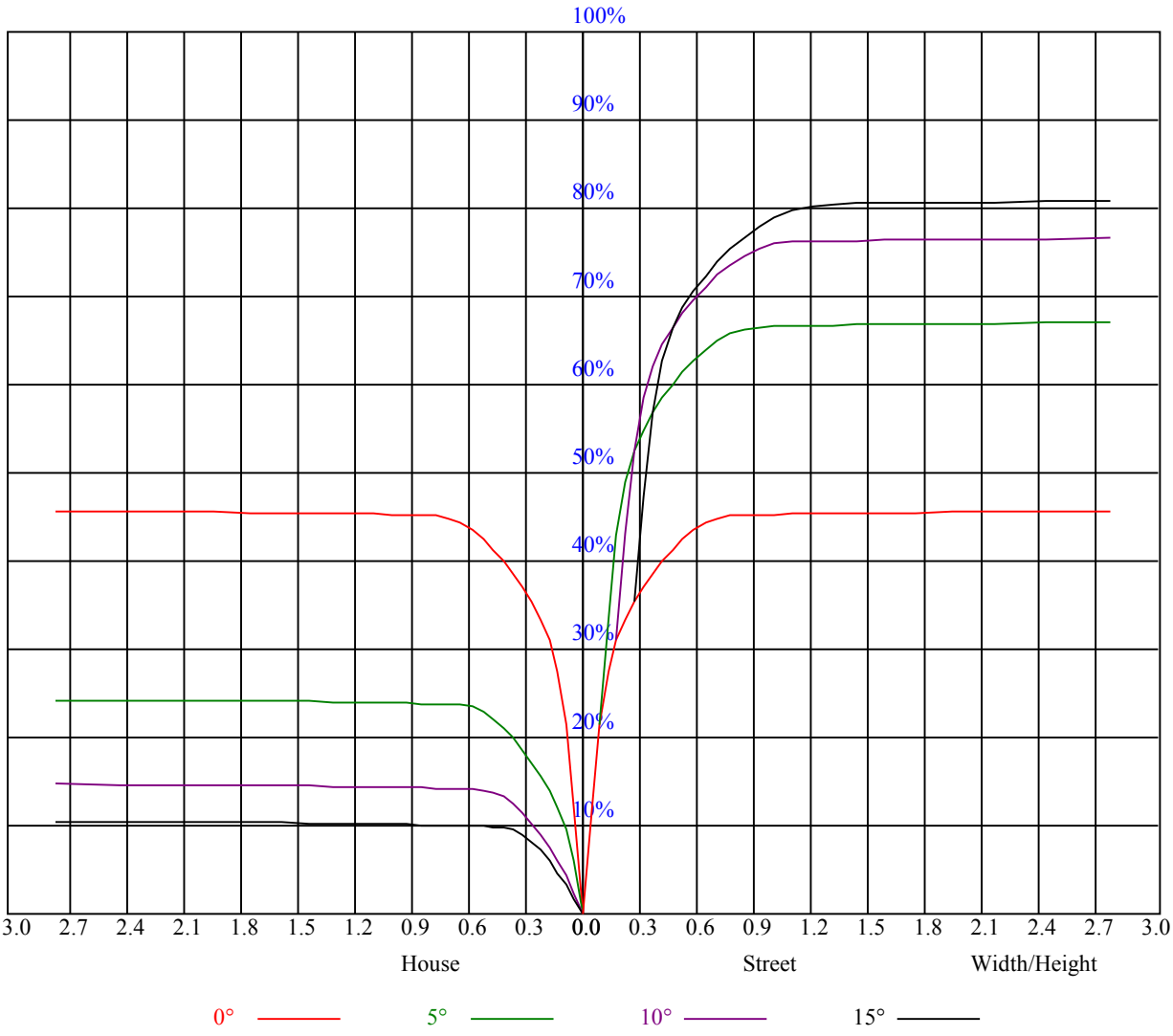


Equipment: GMS1980 Date: 2018/9/26 Operator: NT07
Temperature(°C): 25.0 Humidity(%): 60.0% Distance(m): 7.50

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	1.10	1.10	1.10	1.07	1.07	1.07	1.02	1.02	1.02	0.98	0.98	0.98	0.94	0.94	0.94	0.92
1	1.03	1.02	1.00	1.01	1.00	0.98	0.98	0.96	0.95	0.94	0.93	0.92	0.91	0.90	0.90	0.88
2	0.99	0.96	0.93	0.97	0.94	0.92	0.94	0.92	0.90	0.92	0.90	0.88	0.89	0.88	0.87	0.85
3	0.94	0.91	0.88	0.93	0.90	0.88	0.91	0.88	0.86	0.89	0.87	0.85	0.87	0.85	0.84	0.82
4	0.91	0.87	0.84	0.90	0.87	0.84	0.88	0.85	0.83	0.86	0.84	0.82	0.85	0.83	0.81	0.80
5	0.88	0.84	0.81	0.87	0.83	0.81	0.86	0.82	0.80	0.84	0.82	0.79	0.83	0.81	0.79	0.78
6	0.85	0.81	0.78	0.84	0.81	0.78	0.83	0.80	0.78	0.82	0.79	0.77	0.81	0.79	0.77	0.76
7	0.83	0.79	0.76	0.82	0.78	0.76	0.81	0.78	0.76	0.80	0.77	0.75	0.79	0.77	0.75	0.74
8	0.80	0.77	0.74	0.80	0.76	0.74	0.79	0.76	0.74	0.78	0.75	0.73	0.77	0.75	0.73	0.72
9	0.78	0.75	0.72	0.78	0.74	0.72	0.77	0.74	0.72	0.77	0.74	0.72	0.76	0.73	0.71	0.71
10	0.76	0.73	0.71	0.76	0.73	0.70	0.76	0.72	0.70	0.75	0.72	0.70	0.74	0.72	0.70	0.69

Coefficient Utilization Curve



Equipment: GMS1980
Temperature(°C): 25.0

Date: 2018/9/26
Humidity(%): 60.0%

Operator: NT07
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	10838.25	9984.94	8620.88	7214.63	5632.88	4146.19	3054.38	2124.56	1511.44
45.0	10694.25	11001.38	10485.00	9546.19	8128.13	6587.44	5219.44	3796.31	2768.63
90.0	10811.25	11480.63	11183.06	10232.44	8746.88	7288.88	5830.88	4165.88	3048.19
135.0	10221.19	11187.56	11722.50	11126.25	9770.63	8156.25	6693.75	5124.38	3881.25
180.0	10838.25	11086.88	10561.50	9385.31	7910.44	6550.88	5234.63	3741.19	2745.56
225.0	10612.69	9675.00	8454.94	6949.69	5443.88	4211.44	3168.00	2143.13	1344.94
270.0	10811.25	9641.25	8071.88	6390.00	5000.63	3594.38	2947.50	1802.81	1279.13
315.0	10221.19	8665.88	7195.50	5576.63	4071.38	2973.38	2139.75	1113.47	981.51
360.0	10838.25	9984.94	8620.88	7214.63	5632.88	4146.19	3054.38	2124.56	1511.44

C/γ(°)	9.0	10.0	11.0	12.0	13.0	14.0	15.0	16.0	17.0
0.0	993.94	729.56	561.38	468.56	384.75	351.00	330.75	311.06	303.19
45.0	1917.00	1305.56	938.25	717.75	506.25	421.31	375.19	331.88	315.00
90.0	2187.56	1113.24	1027.91	761.23	569.08	456.24	395.16	352.80	325.35
135.0	2975.63	1896.75	1337.06	916.31	663.19	527.06	441.56	375.19	342.00
180.0	1974.94	1101.43	941.68	709.31	544.84	444.09	386.83	344.98	320.29
225.0	1104.81	757.91	587.64	480.88	407.70	362.03	335.53	315.84	304.48
270.0	927.56	651.94	524.81	446.06	384.19	351.56	330.19	310.50	302.06
315.0	714.66	519.30	432.68	379.63	344.14	321.98	310.84	300.71	293.12
360.0	993.94	729.56	561.38	468.56	384.75	351.00	330.75	311.06	303.19

C/γ(°)	18.0	19.0	20.0	21.0	22.0	23.0	24.0	25.0	26.0
0.0	295.88	287.44	284.63	275.01	269.78	265.33	260.55	256.39	252.28
45.0	304.31	295.31	288.56	284.63	276.81	272.76	268.54	264.49	261.00
90.0	308.98	297.51	289.35	282.77	277.65	273.77	269.89	265.22	261.96
135.0	319.50	303.75	293.63	286.88	284.06	274.61	270.23	265.50	261.79
180.0	302.85	292.73	285.36	279.84	274.28	269.66	265.73	261.45	257.96
225.0	294.92	287.27	281.42	276.13	270.45	265.50	261.34	256.44	252.28
270.0	293.63	285.75	284.06	274.67	268.43	264.49	260.33	255.60	252.23
315.0	286.26	279.62	274.78	269.38	264.04	260.21	255.94	251.83	247.73
360.0	295.88	287.44	284.63	275.01	269.78	265.33	260.55	256.39	252.28

C/γ(°)	27.0	28.0	29.0	30.0	31.0	32.0	33.0	34.0	35.0
0.0	248.57	243.90	239.51	235.69	231.30	227.64	204.13	148.39	95.85
45.0	257.91	255.15	251.89	247.61	241.99	237.60	234.45	225.06	188.89
90.0	259.09	254.76	251.44	247.78	242.04	238.22	234.51	229.11	208.86
135.0	257.79	254.87	251.94	248.40	243.34	239.79	235.86	232.14	224.72
180.0	254.59	251.38	247.78	244.01	239.12	235.13	231.47	226.86	203.23
225.0	248.34	243.17	238.61	234.23	230.29	226.01	212.18	166.33	115.03
270.0	247.28	242.38	237.49	233.78	229.67	218.81	183.66	128.98	71.49
315.0	244.07	238.67	234.39	230.51	224.49	187.03	138.60	80.94	36.00
360.0	248.57	243.90	239.51	235.69	231.30	227.64	204.13	148.39	95.85

C/γ(°)	36.0	37.0	38.0	39.0	40.0	41.0	42.0	43.0	44.0
0.0	49.05	15.19	8.55	7.82	7.03	6.02	5.18	4.33	3.88
45.0	139.56	82.13	33.02	10.69	8.33	7.59	6.75	5.74	4.89
90.0	159.92	100.35	52.71	15.98	8.66	7.93	7.20	6.02	5.12
135.0	195.02	142.14	84.83	37.29	11.36	8.61	7.82	6.75	5.68
180.0	153.11	93.66	47.14	13.84	8.83	7.99	7.09	5.74	4.78
225.0	59.96	20.36	9.56	8.55	7.54	6.41	5.34	4.28	3.83
270.0	30.77	9.84	8.49	7.65	6.53	5.57	4.61	3.94	3.71
315.0	10.69	8.44	7.71	6.69	5.63	4.78	4.16	3.71	3.60
360.0	49.05	15.19	8.55	7.82	7.03	6.02	5.18	4.33	3.88

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	3.71	3.60	3.54	3.49	3.38	3.32	3.32	3.26	3.26
45.0	4.11	3.77	3.71	3.60	3.54	3.54	3.49	3.43	3.38
90.0	4.39	3.94	3.71	3.66	3.60	3.54	3.49	3.43	3.38
135.0	4.73	4.11	3.83	3.71	3.66	3.60	3.54	3.49	3.43
180.0	4.11	3.77	3.66	3.60	3.54	3.49	3.43	3.38	3.32
225.0	3.66	3.60	3.49	3.43	3.43	3.38	3.32	3.26	3.26
270.0	3.60	3.54	3.49	3.43	3.38	3.38	3.32	3.26	3.26
315.0	3.54	3.49	3.43	3.38	3.32	3.32	3.26	3.21	3.21
360.0	3.71	3.60	3.54	3.49	3.38	3.32	3.32	3.26	3.26

C/γ(°)	54.0	55.0	56.0	57.0	58.0	59.0	60.0	61.0	62.0
0.0	3.21	3.21	3.21	3.15	3.09	3.09	3.09	3.09	3.04
45.0	3.38	3.32	3.26	3.21	3.21	3.21	3.15	3.15	3.09
90.0	3.32	3.32	3.26	3.26	3.21	3.21	3.15	3.15	3.09
135.0	3.38	3.32	3.26	3.26	3.21	3.21	3.15	3.15	3.09
180.0	3.26	3.26	3.21	3.15	3.09	3.15	3.09	3.04	3.04
225.0	3.21	3.21	3.15	3.15	3.09	3.09	3.09	3.04	3.04
270.0	3.21	3.21	3.21	3.15	3.09	3.09	3.09	3.09	3.09
315.0	3.15	3.15	3.15	3.09	3.09	3.09	3.04	3.04	3.04
360.0	3.21	3.21	3.21	3.15	3.09	3.09	3.09	3.09	3.04

C/γ(°)	63.0	64.0	65.0	66.0	67.0	68.0	69.0	70.0	71.0
0.0	3.04	3.04	3.04	3.04	2.98	2.98	2.98	2.98	2.98
45.0	3.09	3.09	3.09	3.04	3.09	3.04	3.04	3.04	2.98
90.0	3.09	3.09	3.09	3.04	3.04	3.04	3.04	3.04	2.98
135.0	3.09	3.09	3.09	3.04	3.04	3.04	3.04	3.04	2.98
180.0	3.04	3.04	3.04	2.98	2.98	2.98	2.98	2.98	2.98
225.0	3.04	3.04	3.04	3.04	2.98	2.98	2.98	2.98	2.98
270.0	3.04	3.04	3.04	3.04	3.04	3.04	3.04	3.04	3.04
315.0	3.04	2.98	2.98	2.98	2.98	2.98	2.98	2.98	2.93
360.0	3.04	3.04	3.04	3.04	2.98	2.98	2.98	2.98	2.98

C/γ(°)	72.0	73.0	74.0	75.0	76.0	77.0	78.0	79.0	80.0
0.0	2.98	2.93	2.93	2.98	2.93	2.93	2.93	2.93	2.93
45.0	2.98	2.98	2.98	2.98	2.98	2.98	2.93	2.98	2.98
90.0	3.04	3.04	3.04	2.98	2.98	2.98	2.98	2.98	2.98
135.0	2.98	2.98	2.98	2.98	2.98	2.98	2.93	2.93	2.93
180.0	2.93	2.93	2.93	2.93	2.93	2.93	2.93	2.93	2.93
225.0	2.98	2.98	2.98	2.93	2.98	2.98	2.93	2.93	2.93
270.0	3.04	2.98	2.98	3.04	3.04	2.98	3.04	2.98	2.98
315.0	2.98	2.98	2.98	2.93	2.93	2.93	2.93	2.93	2.93
360.0	2.98	2.93	2.93	2.98	2.93	2.93	2.93	2.93	2.93

C/γ(°)	81.0	82.0	83.0	84.0	85.0	86.0	87.0	88.0	89.0
0.0	2.93	2.93	2.93	2.93	2.93	2.93	2.87	2.93	2.93
45.0	2.98	2.98	2.98	2.93	2.93	2.93	2.93	2.93	2.93
90.0	2.98	2.98	3.04	3.04	3.04	2.98	2.93	2.93	2.93
135.0	2.93	2.98	2.93	2.93	2.93	2.93	2.93	2.93	2.93
180.0	2.93	2.93	2.93	2.93	2.93	2.93	2.93	2.93	2.87
225.0	2.93	2.93	2.93	2.98	2.93	2.93	2.93	2.93	2.93
270.0	2.98	2.98	2.98	2.98	3.04	2.93	2.93	2.93	2.93
315.0	2.93	2.93	2.93	2.93	2.93	2.93	2.93	2.93	2.93
360.0	2.93	2.93	2.93	2.93	2.93	2.93	2.87	2.93	2.93

Intensity data(cd)

C/γ(°)	90.0
0.0	2.93
45.0	2.93
90.0	2.93
135.0	2.93
180.0	2.87
225.0	2.93
270.0	2.93
315.0	2.93
360.0	2.93