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NATA

LumCAT: 3-1698-N
Luminaire: 92.70.074.00+92.70.089.00

Report No: NATA0100	Voltage(V): 37.0000
Test No: GC2019012604	Current(A): 0.6000
LampCAT: CREE CXA1816	Power (W): 22.2000
Lamp flux(lm): 2071.0	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): 1610.92
Efficiency(%): 77.78%
Lumens(lm)/Power(W): 72.70
Central intensity(cd): 12637.970
Maximum intensity(cd): 12637.970
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=29.5
[C90/270]Total=29.5
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(%): 77.93%
Up flux rate of LUM(%): - -
Down flux rate of LUM(%): 100.00%
CIE Type : Direct lighting
Output flux ratio in π solid angle : 97.771%

Zonal flux distribution table

γ(°)	Average I(cd)	Zonal F(lm)	Sum F(lm)	Eff Flux(%)	Eff Sum(%)
0.0	12637.969	3.024	3.024	.146%	.188%
1.0	12484.688	23.894	26.917	1.154%	1.671%
2.0	12028.430	46.034	72.951	2.223%	4.529%
3.0	11433.516	65.619	138.571	3.168%	8.602%
4.0	10627.523	81.296	219.867	3.925%	13.649%
5.0	9710.297	92.807	312.673	4.481%	19.410%
6.0	8468.930	97.077	409.75	4.687%	25.436%
7.0	7204.219	96.279	506.029	4.649%	31.413%
8.0	6045.117	92.260	598.289	4.455%	37.140%
9.0	4842.844	83.078	681.367	4.011%	42.297%
10.0	3811.500	72.580	753.947	3.505%	46.802%
11.0	3063.586	64.103	818.05	3.095%	50.782%
12.0	2363.203	53.881	871.931	2.602%	54.126%
13.0	1777.430	43.846	915.777	2.117%	56.848%
14.0	1430.873	37.960	953.737	1.833%	59.205%
15.0	1206.288	34.237	987.975	1.653%	61.330%
16.0	1059.096	32.013	1019.987	1.546%	63.317%
17.0	961.622	30.831	1050.819	1.489%	65.231%
18.0	875.440	29.666	1080.485	1.432%	67.073%
19.0	810.429	28.934	1109.419	1.397%	68.869%
20.0	745.741	27.970	1137.389	1.351%	70.605%
21.0	688.296	27.049	1164.438	1.306%	72.284%
22.0	638.684	26.237	1190.675	1.267%	73.913%
23.0	587.201	25.160	1215.835	1.215%	75.475%
24.0	536.070	23.910	1239.746	1.155%	76.959%
25.0	491.829	22.794	1262.539	1.101%	78.374%
26.0	450.422	21.653	1284.192	1.046%	79.718%
27.0	411.666	20.495	1304.687	.990%	80.990%
28.0	377.599	19.440	1324.127	.939%	82.197%
29.0	345.445	18.365	1342.492	.887%	83.337%
30.0	316.111	17.333	1359.825	.837%	84.413%
31.0	292.212	16.504	1376.329	.797%	85.438%
32.0	264.656	15.380	1391.708	.743%	86.392%
33.0	243.162	14.523	1406.231	.701%	87.294%
34.0	219.874	13.483	1419.714	.651%	88.131%
35.0	200.524	12.613	1432.327	.609%	88.914%
36.0	185.098	11.931	1444.258	.576%	89.654%
37.0	169.460	11.184	1455.441	.540%	90.349%

Zonal flux distribution table

γ(°)	Average I(cd)	Zonal F(lm)	Sum F(lm)	Eff Flux(%)	Eff Sum(%)
38.0	155.883	10.524	1465.966	.508%	91.002%
39.0	144.084	9.944	1475.909	.480%	91.619%
40.0	133.938	9.441	1485.35	.456%	92.205%
41.0	124.102	8.928	1494.279	.431%	92.759%
42.0	114.785	8.423	1502.701	.407%	93.282%
43.0	105.342	7.878	1510.58	.380%	93.771%
44.0	97.109	7.397	1517.977	.357%	94.231%
45.0	89.480	6.938	1524.916	.335%	94.661%
46.0	81.183	6.404	1531.32	.309%	95.059%
47.0	73.245	5.874	1537.194	.284%	95.424%
48.0	66.312	5.404	1542.598	.261%	95.759%
49.0	59.175	4.897	1547.495	.236%	96.063%
50.0	52.221	4.387	1551.882	.212%	96.335%
51.0	46.920	3.999	1555.881	.193%	96.584%
52.0	41.695	3.603	1559.484	.174%	96.807%
53.0	36.661	3.211	1562.695	.155%	97.006%
54.0	32.709	2.902	1565.596	.140%	97.187%
55.0	28.891	2.595	1568.192	.125%	97.348%
56.0	25.495	2.318	1570.51	.112%	97.492%
57.0	22.901	2.106	1572.616	.102%	97.622%
58.0	20.552	1.911	1574.527	.092%	97.741%
59.0	18.563	1.745	1576.272	.084%	97.849%
60.0	17.163	1.630	1577.902	.079%	97.951%
61.0	16.052	1.540	1579.441	.074%	98.046%
62.0	15.420	1.493	1580.934	.072%	98.139%
63.0	14.941	1.460	1582.394	.070%	98.229%
64.0	14.435	1.423	1583.817	.069%	98.318%
65.0	13.985	1.390	1585.207	.067%	98.404%
66.0	13.641	1.367	1586.574	.066%	98.489%
67.0	13.240	1.336	1587.91	.065%	98.572%
68.0	12.860	1.308	1589.218	.063%	98.653%
69.0	12.544	1.284	1590.502	.062%	98.733%
70.0	12.227	1.260	1591.762	.061%	98.811%
71.0	11.869	1.231	1592.992	.059%	98.887%
72.0	11.566	1.206	1594.199	.058%	98.962%
73.0	11.243	1.179	1595.378	.057%	99.035%
74.0	10.948	1.154	1596.532	.056%	99.107%
75.0	10.666	1.130	1597.662	.055%	99.177%

Zonal flux distribution table

γ(°)	Average I(cd)	Zonal F(lm)	Sum F(lm)	Eff Flux(%)	Eff Sum(%)
76.0	10.399	1.107	1598.768	.053%	99.246%
77.0	10.125	1.082	1599.85	.052%	99.313%
78.0	9.900	1.062	1600.912	.051%	99.379%
79.0	9.640	1.038	1601.95	.050%	99.443%
80.0	9.323	1.007	1602.957	.049%	99.506%
81.0	9.056	0.981	1603.937	.047%	99.567%
82.0	8.733	0.948	1604.886	.046%	99.626%
83.0	8.367	0.911	1605.796	.044%	99.682%
84.0	8.023	0.875	1606.671	.042%	99.736%
85.0	7.692	0.840	1607.512	.041%	99.789%
86.0	7.341	0.803	1608.315	.039%	99.838%
87.0	7.045	0.772	1609.086	.037%	99.886%
88.0	6.806	0.746	1609.832	.036%	99.933%
89.0	6.616	0.725	1610.558	.035%	99.978%
90.0	6.560	0.360	1610.917	.017%	100.000%

Zonal flux distribution table

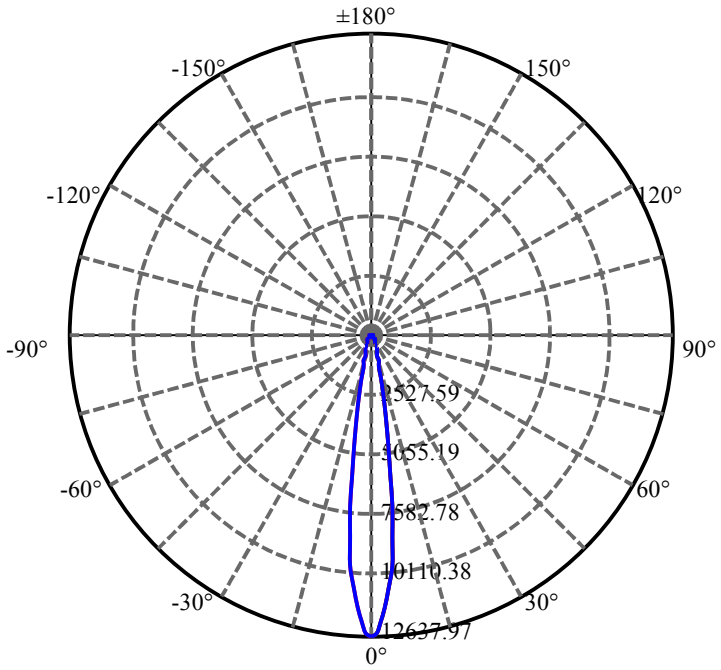
ZONAL LUMEN SUMMARY

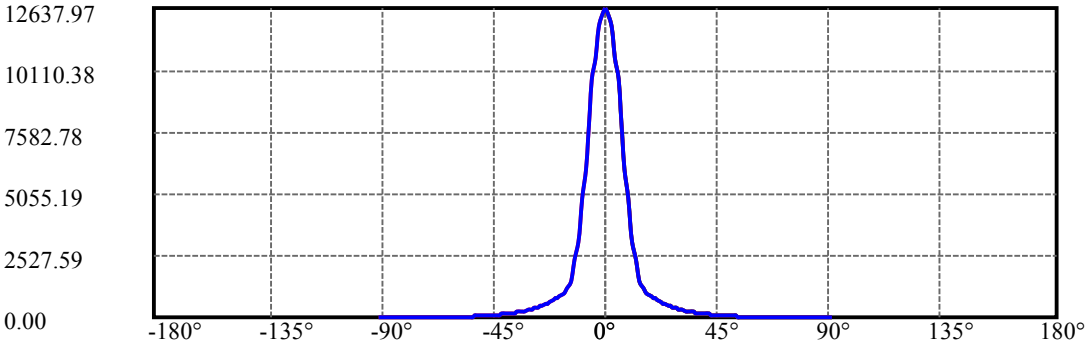
Zone	Lumens	%Lamp	%Fixt
0-30	1359.82	65.66%	84.41%
0-40	1485.35	71.72%	92.21%
0-60	1577.90	76.19%	97.95%
0-90	1610.56	77.77%	99.98%
0-120	1610.56	77.77%	99.98%
0-180	1610.92	77.78%	100.00%
60-90	34.29	1.66%	2.13%
90-120	0.00	0.00%	0.00%
90-130	0.00	0.00%	0.00%
90-150	0.00	0.00%	0.00%
90-180	0.00	0.00%	0.00%
0-26.22	1288.73	62.23%	80.00%

ZONAL LUMEN SUMMARY

0-10	753.95
10-20	383.44
20-30	222.44
30-40	125.53
40-50	66.53
50-60	26.02
60-70	13.86
70-80	11.19
80-90	7.60
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):

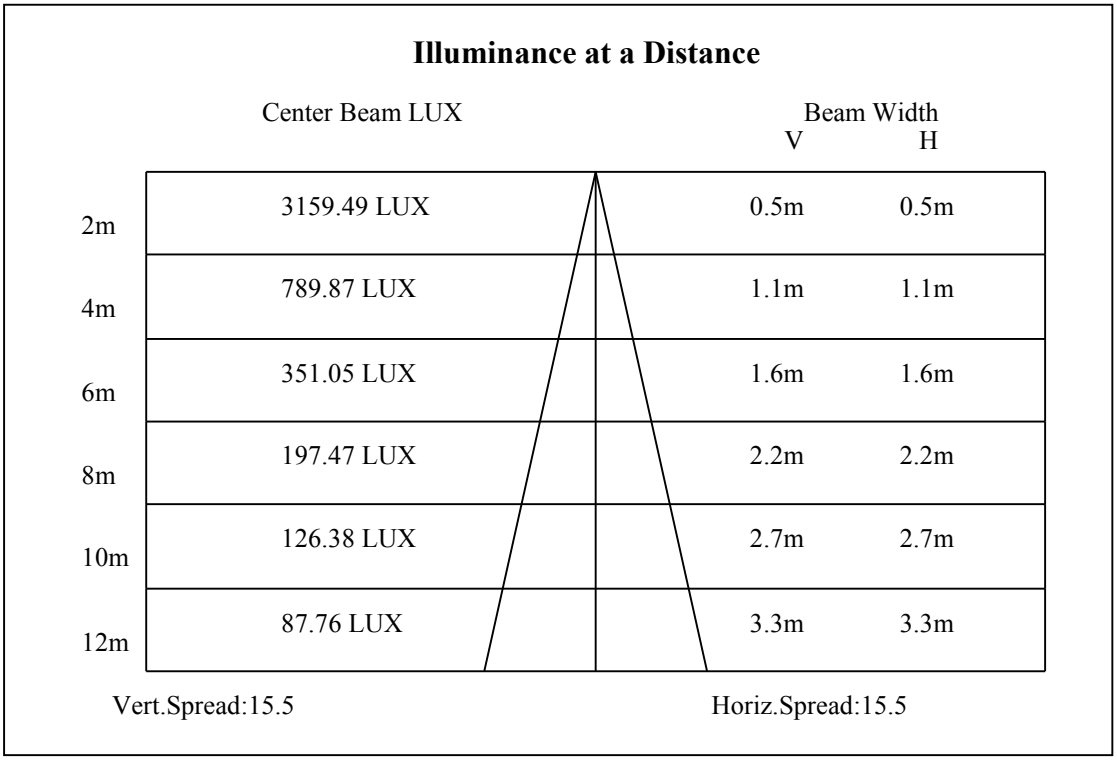
C0/C180:

C90/C270:

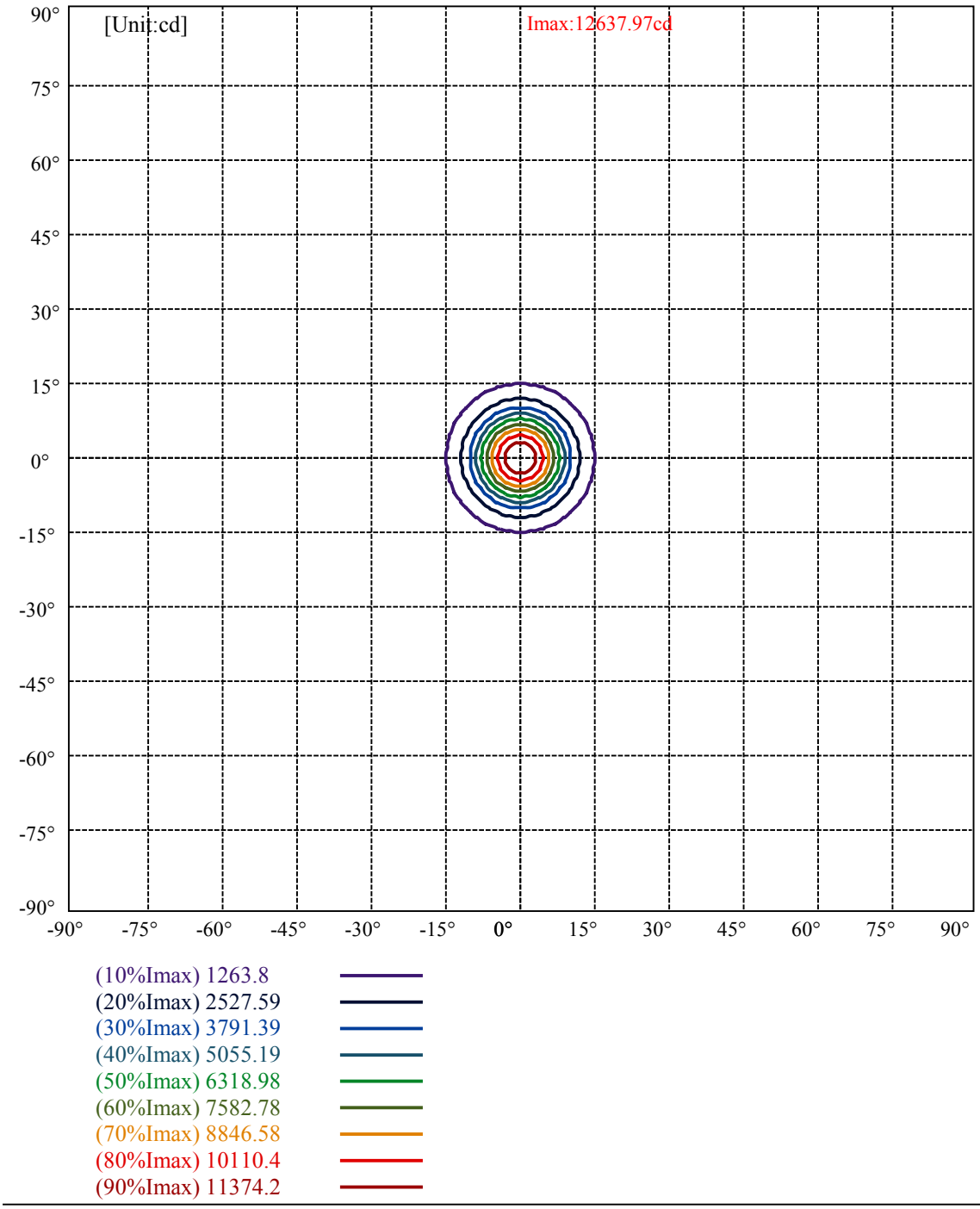
Field angle(10%Imax):C0/180Left:14.7 Right:14.7
:C90/270Left:14.7 Right:14.7

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)

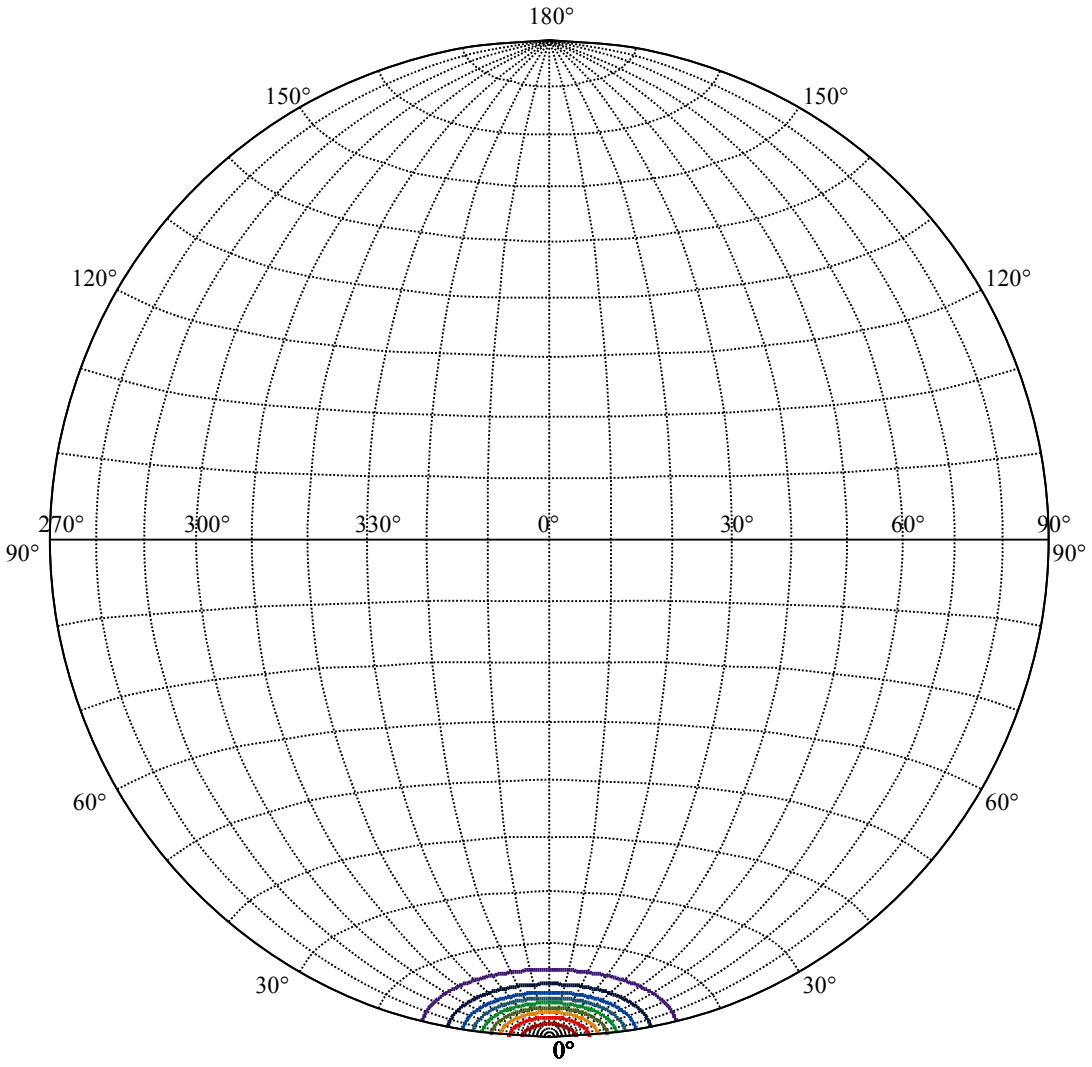


Equipment: GMS1980
Temperature(°C): 10.0

Date: 2019/1/26
Humidity(%): 65.0%

Operator: NT07
Distance(m): 7.50

ISO candela diagram on circular web



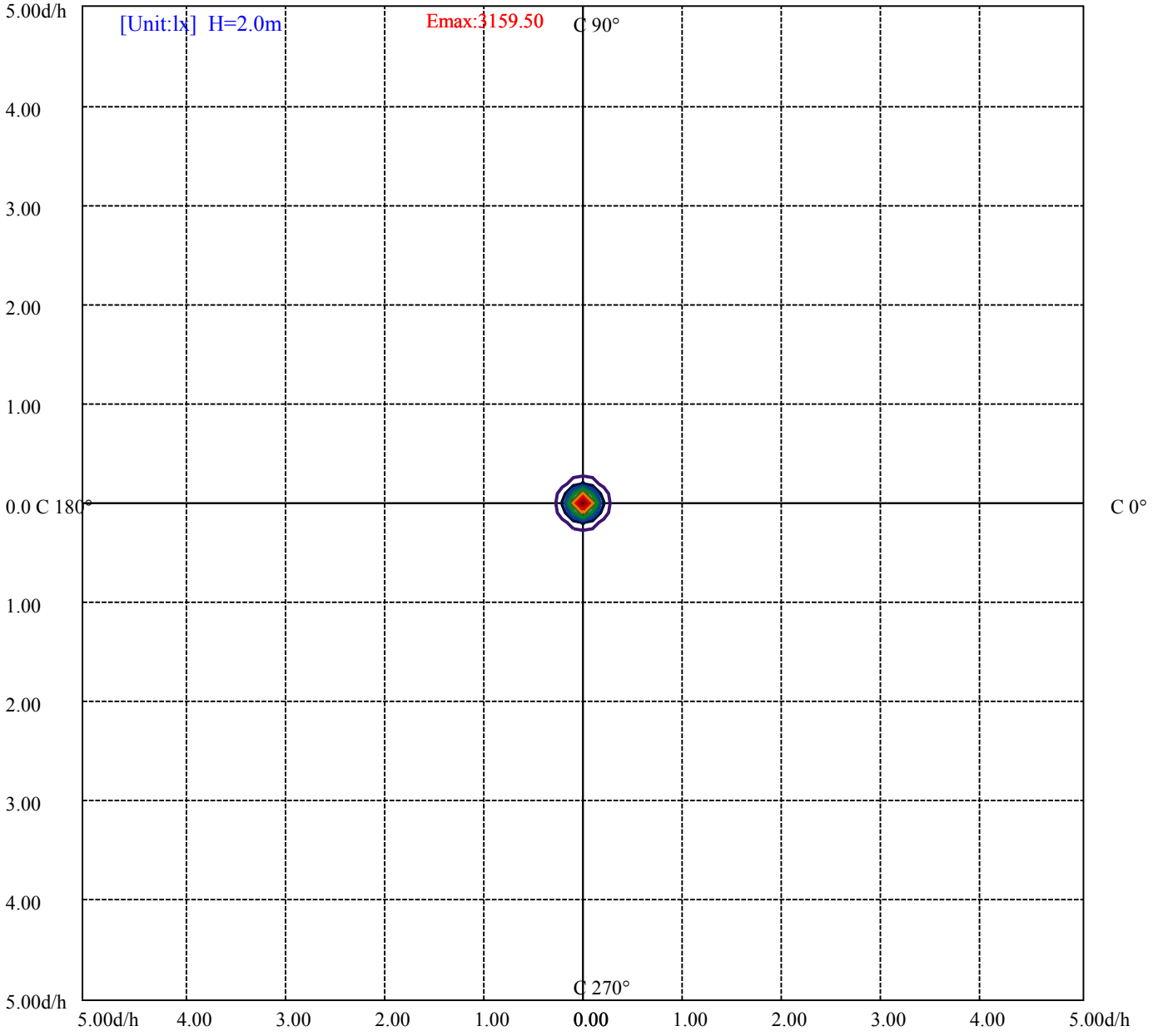
House [Unit:cd] Road

Imax:12637.97

(10%Imax) 1263.8
(20%Imax) 2527.59
(30%Imax) 3791.39
(40%Imax) 5055.19
(50%Imax) 6318.98
(60%Imax) 7582.78
(70%Imax) 8846.58
(80%Imax) 10110.4
(90%Imax) 11374.2

Equipment: GMS1980 Date: 2019/1/26 Operator: NT07
Temperature(°C): 10.0 Humidity(%): 65.0% Distance(m): 7.50

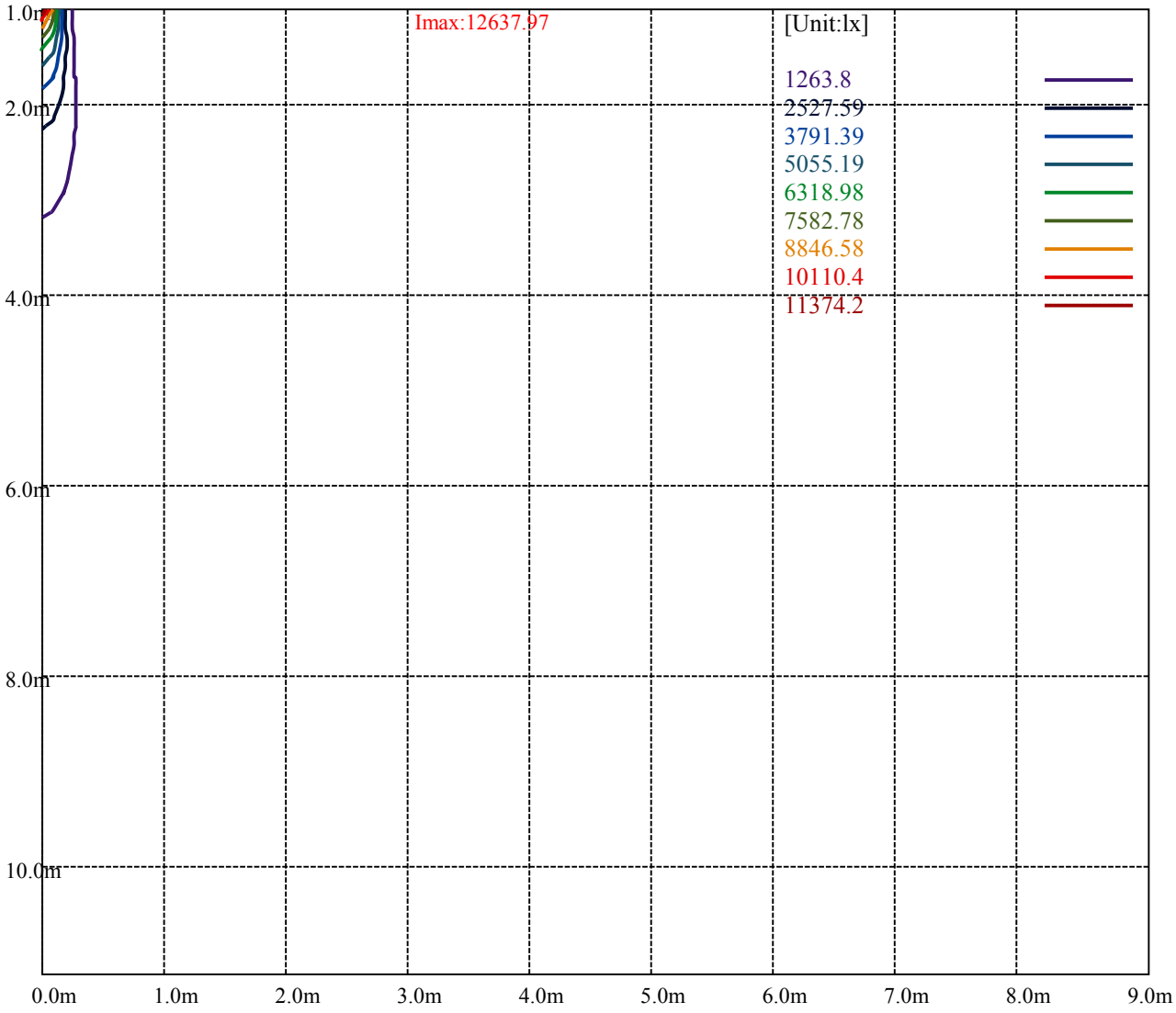
ISO illuminance diagram



(10%Emax) 315.9475
(20%Emax) 631.8975
(30%Emax) 947.845
(40%Emax) 1263.795
(50%Emax) 1579.743
(60%Emax) 1895.693
(70%Emax) 2211.64
(80%Emax) 2527.6
(90%Emax) 2843.55

Equipment: GMS1980
Temperature(°C): 10.0
Date: 2019/1/26
Humidity(%): 65.0%
Operator: NT07
Distance(m): 7.50

Space ISO Lux diagram



Equipment: GMS1980
Temperature(°C): 10.0

Date: 2019/1/26
Humidity(%): 65.0%

Operator: NT07
Distance(m): 7.50

Luminance Limitting Curve(no luminous side)

Luminance Table

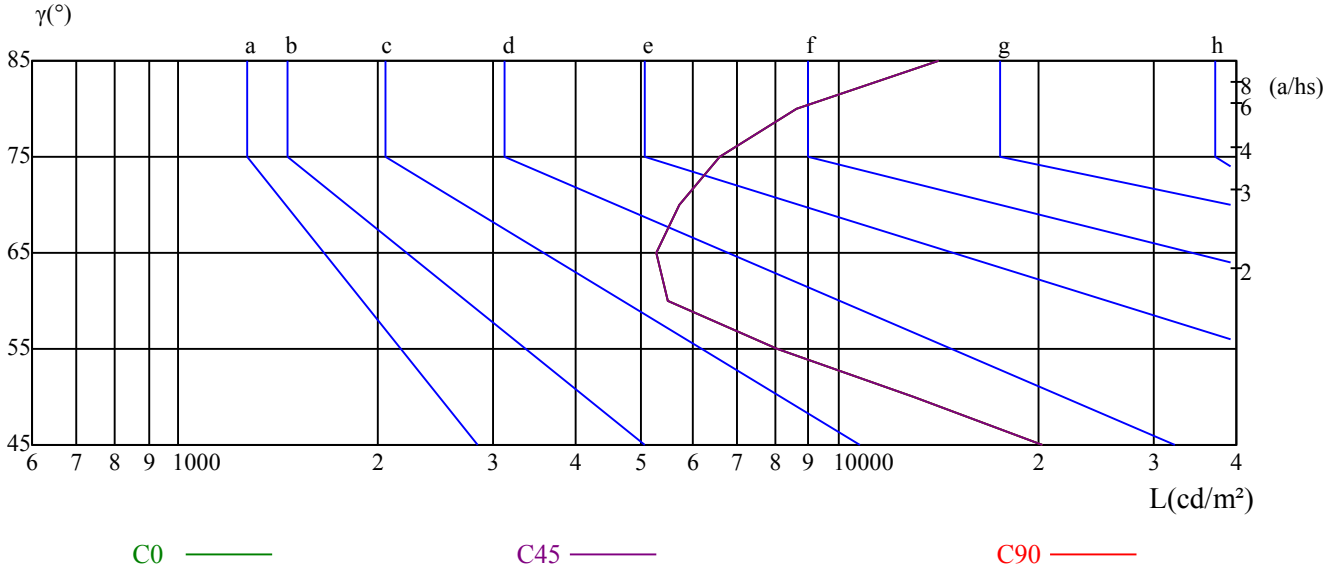
γ	45	50	55	60	65	70	75	80	85
C0	20276	13017	8071	5500	5302	5728	6603	8603	14142
C45	20276	13017	8071	5500	5302	5728	6603	8603	14142
C90	20276	13017	8071	5500	5302	5728	6603	8603	14142

L(Hor)(65)	L(Ver)(65)	L45(65)	L(Hor)(75)	L(Ver)(75)	L45(75)	L(Hor)(85)	L(Ver)(85)	L45(85)
5302	5302	5302	6603	6603	6603	14142	14142	14142

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

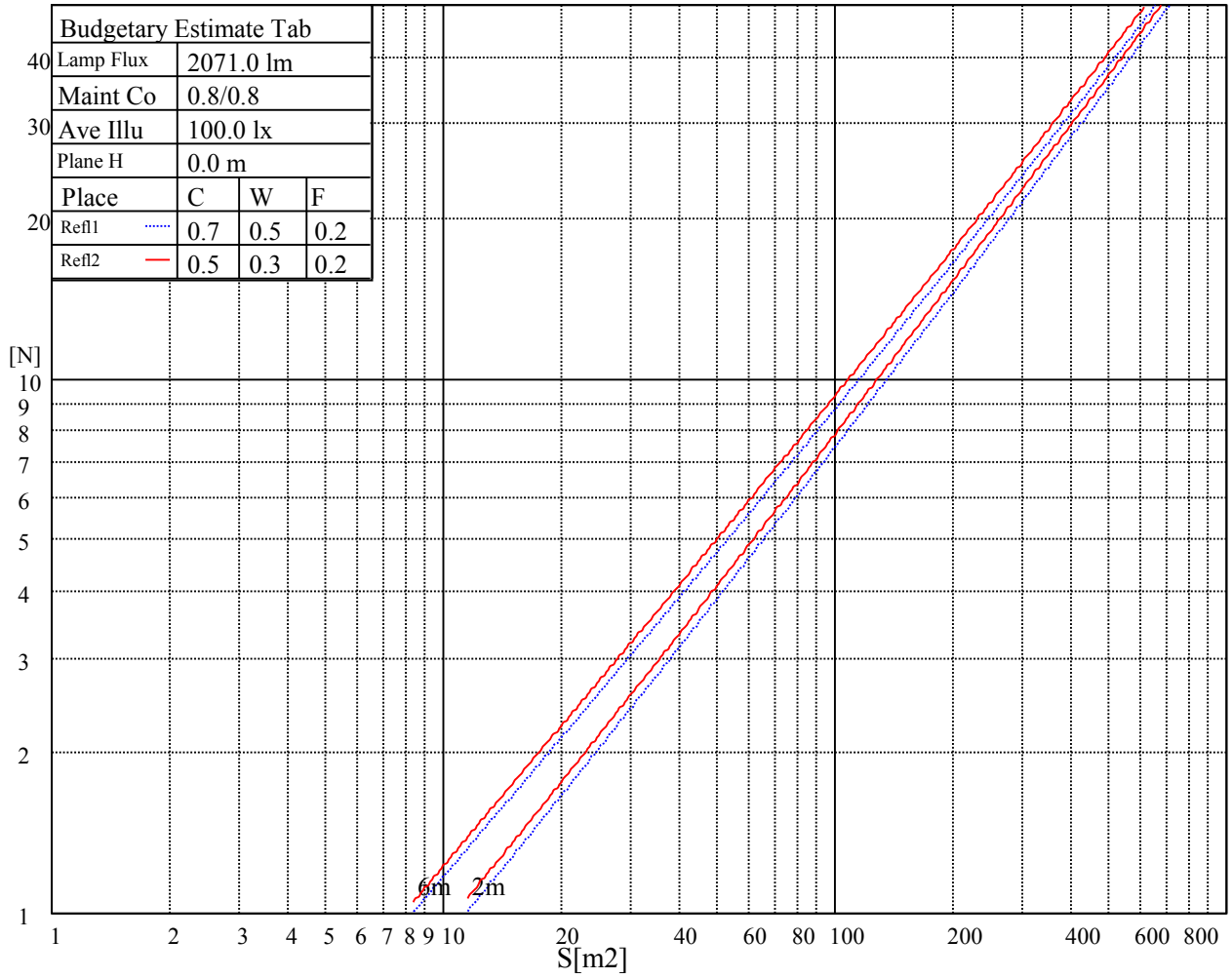


Equipment: GMS1980 Date: 2019/1/26 Operator: NT07
Temperature(°C): 10.0 Humidity(%): 65.0% Distance(m): 7.50

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	9.45	10.44	9.82	10.75	11.06	9.44	10.43	9.81	10.74	11.06
	3H	10.90	11.77	11.28	12.10	12.47	10.90	11.77	11.28	12.10	12.47
	4H	11.77	12.58	12.18	12.93	13.32	11.77	12.58	12.18	12.93	13.32
	6H	12.81	13.55	13.23	13.92	14.32	12.81	13.55	13.23	13.93	14.32
	8H	13.39	14.08	13.83	14.47	14.88	13.39	14.09	13.83	14.48	14.89
	12H	14.38	15.05	14.82	15.43	15.86	14.38	15.04	14.82	15.43	15.86
4H	2H	9.73	10.53	10.14	10.89	11.28	9.72	10.53	10.13	10.88	11.27
	3H	11.53	12.19	11.95	12.60	13.01	11.53	12.19	11.95	12.60	13.01
	4H	12.63	13.22	13.07	13.64	14.09	12.63	13.22	13.07	13.64	14.09
	6H	13.80	14.30	14.27	14.75	15.23	13.80	14.31	14.27	14.76	15.23
	8H	14.52	14.99	15.00	15.45	15.92	14.53	15.00	15.01	15.45	15.92
	12H	15.56	15.97	16.05	16.46	16.93	15.56	15.97	16.05	16.45	16.93
8H	4H	13.05	13.52	13.53	13.97	14.45	13.05	13.52	13.53	13.97	14.45
	6H	14.52	14.89	15.03	15.39	15.88	14.52	14.89	15.03	15.40	15.88
	8H	15.43	15.76	15.96	16.28	16.78	15.43	15.76	15.96	16.29	16.78
	12H	16.73	17.02	17.26	17.52	18.10	16.73	17.02	17.25	17.52	18.10
12H	4H	13.15	13.55	13.64	14.04	14.52	13.14	13.55	13.64	14.04	14.52
	6H	14.98	15.05	15.25	15.52	16.07	14.99	15.05	15.25	15.52	16.07
	8H	15.74	16.03	16.26	16.53	17.11	15.74	16.03	16.27	16.53	17.11

Variation with the observer position at spacings:		
S = 1.0H	1.8/-2.4	1.8/-2.4
S = 1.5H	3.0/-2.3	3.0/-2.3
S = 2.0H	4.2/-2.0	4.2/-2.0
Standard tables:	BK4	BK4
Uncorrected UGR	0.4	0.4

Budgetary Estimate Table

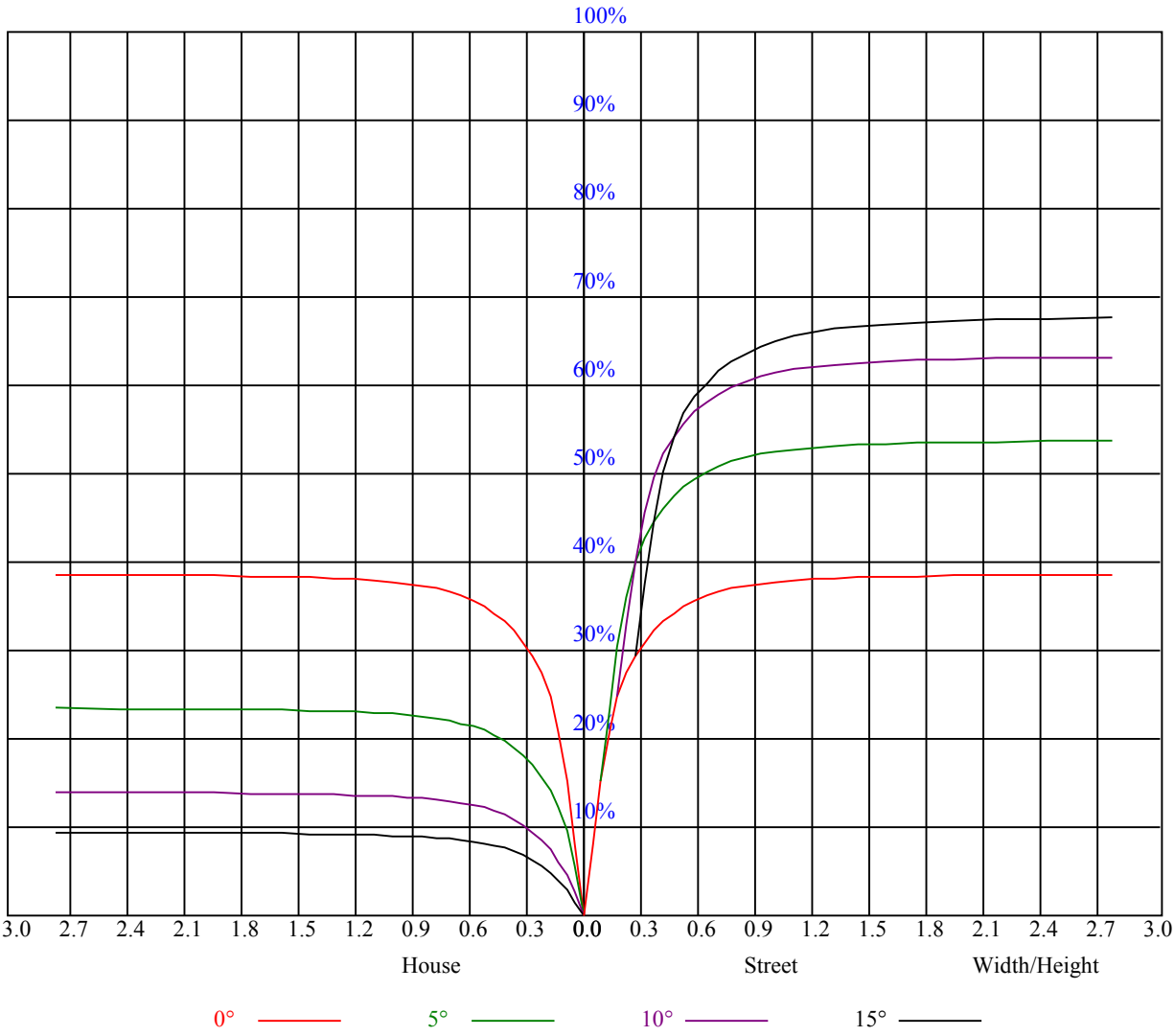


Equipment: GMS1980 Date: 2019/1/26 Operator: NT07
Temperature(°C): 10.0 Humidity(%): 65.0% Distance(m): 7.50

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	0.93	0.93	0.93	0.91	0.91	0.91	0.87	0.87	0.87	0.83	0.83	0.83	0.80	0.80	0.80	0.78
1	0.87	0.86	0.84	0.86	0.84	0.83	0.82	0.81	0.80	0.80	0.79	0.78	0.77	0.76	0.76	0.74
2	0.83	0.80	0.78	0.81	0.79	0.77	0.79	0.77	0.75	0.77	0.75	0.74	0.75	0.73	0.72	0.71
3	0.79	0.76	0.73	0.78	0.75	0.73	0.76	0.74	0.72	0.74	0.72	0.71	0.72	0.71	0.69	0.68
4	0.76	0.72	0.70	0.75	0.72	0.69	0.73	0.71	0.68	0.72	0.69	0.68	0.70	0.68	0.67	0.66
5	0.73	0.69	0.67	0.72	0.69	0.66	0.71	0.68	0.66	0.70	0.67	0.65	0.68	0.66	0.65	0.64
6	0.70	0.67	0.64	0.70	0.66	0.64	0.68	0.66	0.64	0.68	0.65	0.63	0.67	0.64	0.63	0.62
7	0.68	0.64	0.62	0.67	0.64	0.62	0.67	0.64	0.62	0.66	0.63	0.61	0.65	0.63	0.61	0.60
8	0.66	0.62	0.60	0.65	0.62	0.60	0.65	0.62	0.60	0.64	0.61	0.60	0.63	0.61	0.59	0.59
9	0.64	0.61	0.58	0.64	0.61	0.58	0.63	0.60	0.58	0.62	0.60	0.58	0.62	0.60	0.58	0.57
10	0.62	0.59	0.57	0.62	0.59	0.57	0.62	0.59	0.57	0.61	0.58	0.57	0.61	0.58	0.57	0.56

Coefficient Utilization Curve



Equipment: GMS1980	Date: 2019/1/26	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	12690.00	12436.88	11902.50	11160.00	10327.50	9331.88	7914.38	6755.63	5619.38
45.0	12650.63	12358.13	11846.25	10996.88	10147.50	9123.75	7683.75	6468.75	5332.50
90.0	12600.00	12279.38	11211.19	11025.56	10067.63	9038.81	7723.13	6363.56	5223.94
135.0	12611.25	12645.00	12403.13	11823.75	11160.00	10344.38	9095.63	7959.38	6761.25
180.0	12690.00	12673.13	12397.50	11733.75	10952.44	10168.88	8994.38	7674.75	6466.50
225.0	12650.63	12656.25	12436.88	11896.88	11147.06	10288.13	9298.69	7884.00	6690.38
270.0	12600.00	12605.63	12318.75	11778.75	11103.75	10271.25	9011.25	7914.38	6755.63
315.0	12611.25	12223.13	11711.25	11052.56	10114.31	9115.31	8030.25	6613.31	5511.38
360.0	12690.00	12436.88	11902.50	11160.00	10327.50	9331.88	7914.38	6755.63	5619.38

C/γ(°)	9.0	10.0	11.0	12.0	13.0	14.0	15.0	16.0	17.0
0.0	4353.75	3465.00	2885.63	2053.69	1583.44	1311.19	1121.06	1005.19	906.75
45.0	4066.88	3200.63	2919.38	1895.06	1490.63	1260.00	1098.00	980.44	894.94
90.0	4196.81	3110.63	2417.63	1879.88	1419.75	1109.93	1045.80	948.32	856.35
135.0	5355.00	4348.13	3459.38	2885.63	2003.06	1603.13	1299.38	1111.50	992.81
180.0	5330.81	4075.31	3223.13	2527.88	1871.44	1512.56	1214.44	1097.21	978.92
225.0	5552.44	4399.88	3409.88	2696.63	2137.50	1644.75	1389.94	1104.24	1077.47
270.0	5383.13	4381.88	3504.38	2846.25	2058.19	1650.38	1373.06	1176.19	1046.25
315.0	4503.94	3510.56	2689.31	2120.63	1655.44	1355.06	1108.63	1049.68	939.49
360.0	4353.75	3465.00	2885.63	2053.69	1583.44	1311.19	1121.06	1005.19	906.75

C/γ(°)	18.0	19.0	20.0	21.0	22.0	23.0	24.0	25.0	26.0
0.0	830.81	774.00	716.06	661.50	615.38	569.25	513.56	471.38	433.13
45.0	813.94	756.56	694.13	637.88	590.63	540.56	492.19	451.69	416.81
90.0	794.98	740.53	684.73	631.58	585.90	536.34	487.97	447.75	407.25
135.0	892.13	821.25	752.06	693.00	643.50	591.19	541.13	496.69	455.63
180.0	896.51	828.56	762.02	703.80	655.37	602.61	550.69	507.09	462.43
225.0	973.18	896.01	821.53	755.33	701.21	642.71	593.27	541.35	494.04
270.0	947.81	875.81	807.19	752.63	695.81	647.44	587.25	542.25	498.94
315.0	854.16	790.71	728.21	670.67	621.68	567.51	522.51	476.44	435.15
360.0	830.81	774.00	716.06	661.50	615.38	569.25	513.56	471.38	433.13

C/γ(°)	27.0	28.0	29.0	30.0	31.0	32.0	33.0	34.0	35.0
0.0	394.31	359.44	330.75	300.38	284.06	249.08	232.09	209.53	191.03
45.0	377.44	349.31	322.31	294.75	285.75	245.36	224.72	202.33	186.36
90.0	374.91	341.72	310.28	283.05	259.71	234.39	216.73	199.91	181.13
135.0	411.19	379.69	349.31	318.38	288.00	284.63	239.01	216.06	199.46
180.0	426.21	388.97	353.98	324.56	296.38	265.73	244.46	225.51	203.57
225.0	454.89	418.89	380.81	353.14	326.48	294.53	270.68	248.63	225.84
270.0	453.38	412.88	380.81	346.50	315.00	289.69	284.06	241.93	220.61
315.0	401.01	369.90	335.31	308.14	282.32	253.86	233.55	215.10	196.20
360.0	394.31	359.44	330.75	300.38	284.06	249.08	232.09	209.53	191.03

C/γ(°)	36.0	37.0	38.0	39.0	40.0	41.0	42.0	43.0	44.0
0.0	178.14	161.72	150.08	140.12	129.38	120.88	111.88	102.15	94.61
45.0	172.41	156.77	144.45	133.99	125.78	115.31	105.13	96.53	89.10
90.0	167.51	154.91	142.71	132.19	124.37	113.85	105.58	97.20	88.31
135.0	185.06	168.47	154.74	143.38	132.19	123.36	113.57	104.74	97.54
180.0	187.71	173.31	159.02	146.53	136.69	126.84	117.90	108.84	100.35
225.0	205.31	188.61	171.62	156.21	145.13	134.55	124.71	114.13	104.74
270.0	205.20	185.57	171.28	158.57	145.18	135.90	126.45	115.26	107.16
315.0	179.44	166.33	153.17	141.69	132.81	122.12	113.06	103.89	95.06
360.0	178.14	161.72	150.08	140.12	129.38	120.88	111.88	102.15	94.61

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	87.36	78.13	71.10	64.18	56.93	50.46	45.39	40.28	35.66
45.0	80.94	73.13	66.43	60.02	52.65	47.48	42.64	37.69	33.19
90.0	82.24	74.59	67.11	60.75	54.90	47.98	43.03	38.64	33.47
135.0	89.38	81.56	74.70	67.89	60.02	54.11	49.22	42.69	37.74
180.0	92.87	84.66	76.44	69.41	62.61	54.84	49.16	44.04	39.04
225.0	96.58	88.59	78.64	71.21	64.07	55.63	49.89	44.66	39.04
270.0	99.17	89.21	81.34	73.69	65.31	57.66	51.58	45.56	40.39
315.0	87.30	79.59	70.20	63.34	56.93	49.61	44.44	39.99	34.76
360.0	87.36	78.13	71.10	64.18	56.93	50.46	45.39	40.28	35.66

C/γ(°)	54.0	55.0	56.0	57.0	58.0	59.0	60.0	61.0	62.0
0.0	31.84	27.90	25.03	22.33	19.97	18.17	16.59	15.75	15.24
45.0	29.53	25.93	23.06	20.93	18.90	17.44	16.31	15.64	15.19
90.0	29.76	26.61	23.68	21.21	19.35	17.55	16.43	15.69	15.19
135.0	34.03	29.48	25.93	23.34	20.87	19.01	17.49	16.20	15.64
180.0	34.43	30.66	27.00	24.02	21.71	19.46	17.83	16.43	15.69
225.0	35.04	31.33	27.11	24.64	21.94	19.41	17.94	16.54	15.64
270.0	36.17	31.78	28.35	25.03	22.22	20.08	18.28	16.54	15.81
315.0	30.88	27.45	23.79	21.71	19.46	17.38	16.43	15.64	14.96
360.0	31.84	27.90	25.03	22.33	19.97	18.17	16.59	15.75	15.24

C/γ(°)	63.0	64.0	65.0	66.0	67.0	68.0	69.0	70.0	71.0
0.0	14.74	14.23	13.84	13.50	13.05	12.71	12.43	12.09	11.70
45.0	14.74	14.18	13.84	13.56	13.05	12.71	12.43	12.09	11.70
90.0	14.68	14.23	13.78	13.44	13.11	12.66	12.32	12.04	11.76
135.0	15.13	14.63	14.18	13.84	13.39	13.05	12.71	12.43	12.09
180.0	15.19	14.68	14.18	13.78	13.44	13.05	12.71	12.38	12.04
225.0	15.19	14.68	14.18	13.78	13.44	13.05	12.66	12.38	11.98
270.0	15.24	14.68	14.23	13.84	13.44	12.99	12.77	12.38	12.04
315.0	14.63	14.18	13.67	13.39	12.99	12.66	12.32	12.04	11.64
360.0	14.74	14.23	13.84	13.50	13.05	12.71	12.43	12.09	11.70

C/γ(°)	72.0	73.0	74.0	75.0	76.0	77.0	78.0	79.0	80.0
0.0	11.42	11.03	10.80	10.52	10.29	10.07	9.90	9.62	9.34
45.0	11.48	11.14	10.86	10.63	10.35	10.07	9.84	9.56	9.23
90.0	11.36	11.08	10.74	10.46	10.24	9.96	9.73	9.56	9.17
135.0	11.81	11.48	11.19	10.86	10.58	10.29	10.07	9.84	9.56
180.0	11.70	11.42	11.08	10.74	10.46	10.18	9.90	9.62	9.34
225.0	11.64	11.36	11.03	10.74	10.46	10.18	9.90	9.62	9.28
270.0	11.76	11.36	11.08	10.80	10.52	10.24	10.01	9.68	9.45
315.0	11.36	11.08	10.80	10.58	10.29	10.01	9.84	9.62	9.23
360.0	11.42	11.03	10.80	10.52	10.29	10.07	9.90	9.62	9.34

C/γ(°)	81.0	82.0	83.0	84.0	85.0	86.0	87.0	88.0	89.0
0.0	9.11	8.72	8.38	8.04	7.65	7.31	6.98	6.75	6.53
45.0	8.94	8.66	8.27	7.93	7.59	7.20	6.92	6.69	6.53
90.0	8.94	8.66	8.27	7.93	7.59	7.20	6.92	6.69	6.58
135.0	9.23	8.83	8.55	8.16	7.82	7.48	7.14	6.92	6.69
180.0	9.06	8.78	8.38	8.04	7.71	7.37	7.03	6.81	6.64
225.0	9.00	8.72	8.33	8.04	7.76	7.43	7.14	6.92	6.69
270.0	9.23	8.83	8.55	8.10	7.82	7.48	7.20	6.92	6.69
315.0	8.94	8.66	8.21	7.93	7.59	7.26	7.03	6.75	6.58
360.0	9.11	8.72	8.38	8.04	7.65	7.31	6.98	6.75	6.53

Intensity data(cd)

C/γ(°)	90.0
0.0	6.53
45.0	6.58
90.0	6.58
135.0	6.58
180.0	6.53
225.0	6.53
270.0	6.58
315.0	6.58
360.0	6.53