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Address:380JinOu Road,GaoXin Zone,Jiang Men City,Guangdong,China

NATA

LumCAT: 2-1793-N
Luminaire: 92.70.131.00
Report No: NATA0100
Test No: GC2019011707
LampCAT: CITIZEN CLU038
Lamp flux(lm): 2971.0
Number of Lamps: 1
Length(mm): 69
Phm Type: C

Voltage(V): 34.8000
Current(A): 0.6000
Power (W): 20.8800
PF: 0.0000
Ballast type: DC
Width(mm): 69
Height(mm): 0

Photometric Results

Lumens(lm): 2443.52
Efficiency(%): 82.25%
Lumens(lm)/Power(W): 117.18
Central intensity(cd): 14110.310
Maximum intensity(cd): 14110.310
Angle of maximum intensity: C=0.0 γ=0.0
Beam Angle(50%Imax): [C0/180]Total=17.6
[C90/270]Total=17.6
Field angle(10%Imax): [C0/180]Total=42.9
[C90/270]Total=42.9
Maximum s/h(1/2): C0_180=0.30 C90_270=0.30
Maximum s/h(1/4): C0_180=0.32 C90_270=0.32
Up flux rate of lamp(%): 0.00%
Down flux rate of lamp(%): 82.36%
Up flux rate of LUM(%): - -
Down flux rate of LUM(%): 100.00%
CIE Type : Direct lighting
Output flux ratio in π solid angle : 97.932%

Zonal flux distribution table

γ(°)	Average I(cd)	Zonal F(lm)	Sum F(lm)	Eff Flux(%)	Eff Sum(%)
0.0	14110.313	3.376	3.376	.114%	.138%
1.0	13969.688	26.736	30.112	.900%	1.232%
2.0	13552.734	51.868	81.979	1.746%	3.355%
3.0	12802.148	73.474	155.454	2.473%	6.362%
4.0	11962.828	91.510	246.964	3.080%	10.107%
5.0	11078.578	105.884	352.848	3.564%	14.440%
6.0	10033.664	115.013	467.861	3.871%	19.147%
7.0	8936.297	119.427	587.288	4.020%	24.035%
8.0	7947.000	121.286	708.574	4.082%	28.998%
9.0	6862.219	117.720	826.294	3.962%	33.816%
10.0	5887.477	112.112	938.406	3.774%	38.404%
11.0	5095.688	106.624	1045.029	3.589%	42.767%
12.0	4358.602	99.375	1144.404	3.345%	46.834%
13.0	3709.266	91.501	1235.906	3.080%	50.579%
14.0	3223.406	85.515	1321.421	2.878%	54.079%
15.0	2807.789	79.692	1401.112	2.682%	57.340%
16.0	2518.734	76.133	1477.245	2.563%	60.456%
17.0	2235.727	71.681	1548.926	2.413%	63.389%
18.0	1973.883	66.889	1615.815	2.251%	66.126%
19.0	1797.469	64.173	1679.989	2.160%	68.753%
20.0	1621.898	60.831	1740.82	2.048%	71.242%
21.0	1469.813	57.762	1798.582	1.944%	73.606%
22.0	1337.435	54.941	1853.524	1.849%	75.855%
23.0	1247.941	53.472	1906.995	1.800%	78.043%
24.0	1153.891	51.467	1958.462	1.732%	80.149%
25.0	1072.695	49.714	2008.176	1.673%	82.184%
26.0	1008.696	48.490	2056.666	1.632%	84.168%
27.0	930.860	46.343	2103.009	1.560%	86.065%
28.0	842.351	43.366	2146.376	1.460%	87.839%
29.0	739.399	39.310	2185.686	1.323%	89.448%
30.0	639.232	35.049	2220.735	1.180%	90.883%
31.0	528.806	29.867	2250.602	1.005%	92.105%
32.0	419.112	24.355	2274.957	.820%	93.102%
33.0	334.167	19.958	2294.915	.672%	93.918%
34.0	237.305	14.552	2309.467	.490%	94.514%
35.0	175.830	11.060	2320.527	.372%	94.966%
36.0	127.378	8.210	2328.737	.276%	95.302%
37.0	88.952	5.870	2334.608	.198%	95.543%

Zonal flux distribution table

γ(°)	Average I(cd)	Zonal F(lm)	Sum F(lm)	Eff Flux(%)	Eff Sum(%)
38.0	70.538	4.762	2339.37	.160%	95.738%
39.0	62.142	4.289	2343.658	.144%	95.913%
40.0	56.095	3.954	2347.612	.133%	96.075%
41.0	50.723	3.649	2351.262	.123%	96.224%
42.0	46.280	3.396	2354.658	.114%	96.363%
43.0	42.180	3.155	2357.812	.106%	96.492%
44.0	38.644	2.944	2360.756	.099%	96.613%
45.0	35.670	2.766	2363.522	.093%	96.726%
46.0	33.195	2.618	2366.14	.088%	96.833%
47.0	30.980	2.485	2368.625	.084%	96.935%
48.0	29.320	2.389	2371.014	.080%	97.033%
49.0	27.766	2.298	2373.312	.077%	97.127%
50.0	26.480	2.224	2375.537	.075%	97.218%
51.0	25.474	2.171	2377.708	.073%	97.307%
52.0	24.652	2.130	2379.838	.072%	97.394%
53.0	23.885	2.092	2381.93	.070%	97.479%
54.0	23.365	2.073	2384.003	.070%	97.564%
55.0	22.887	2.056	2386.059	.069%	97.648%
56.0	22.472	2.043	2388.102	.069%	97.732%
57.0	22.155	2.038	2390.139	.069%	97.815%
58.0	21.832	2.030	2392.17	.068%	97.898%
59.0	21.537	2.024	2394.194	.068%	97.981%
60.0	21.255	2.019	2396.213	.068%	98.064%
61.0	21.002	2.014	2398.227	.068%	98.146%
62.0	20.798	2.014	2400.241	.068%	98.229%
63.0	20.524	2.005	2402.246	.067%	98.311%
64.0	20.194	1.990	2404.236	.067%	98.392%
65.0	19.786	1.966	2406.203	.066%	98.473%
66.0	19.266	1.930	2408.133	.065%	98.552%
67.0	18.752	1.893	2410.026	.064%	98.629%
68.0	18.246	1.855	2411.881	.062%	98.705%
69.0	17.761	1.818	2413.699	.061%	98.780%
70.0	17.290	1.782	2415.481	.060%	98.852%
71.0	16.812	1.743	2417.224	.059%	98.924%
72.0	16.383	1.709	2418.933	.058%	98.994%
73.0	15.940	1.672	2420.604	.056%	99.062%
74.0	15.539	1.638	2422.242	.055%	99.129%
75.0	15.138	1.604	2423.846	.054%	99.195%

Zonal flux distribution table

γ(°)	Average I(cd)	Zonal F(lm)	Sum F(lm)	Eff Flux(%)	Eff Sum(%)
76.0	14.730	1.567	2425.413	.053%	99.259%
77.0	14.372	1.536	2426.949	.052%	99.322%
78.0	14.027	1.505	2428.454	.051%	99.383%
79.0	13.683	1.473	2429.927	.050%	99.444%
80.0	13.366	1.444	2431.37	.049%	99.503%
81.0	13.057	1.414	2432.784	.048%	99.561%
82.0	12.734	1.383	2434.167	.047%	99.617%
83.0	12.417	1.352	2435.519	.045%	99.672%
84.0	12.094	1.319	2436.838	.044%	99.726%
85.0	11.777	1.287	2438.124	.043%	99.779%
86.0	11.461	1.254	2439.378	.042%	99.830%
87.0	11.152	1.221	2440.599	.041%	99.880%
88.0	10.856	1.190	2441.789	.040%	99.929%
89.0	10.603	1.163	2442.951	.039%	99.977%
90.0	10.406	0.571	2443.522	.019%	100.000%

Zonal flux distribution table

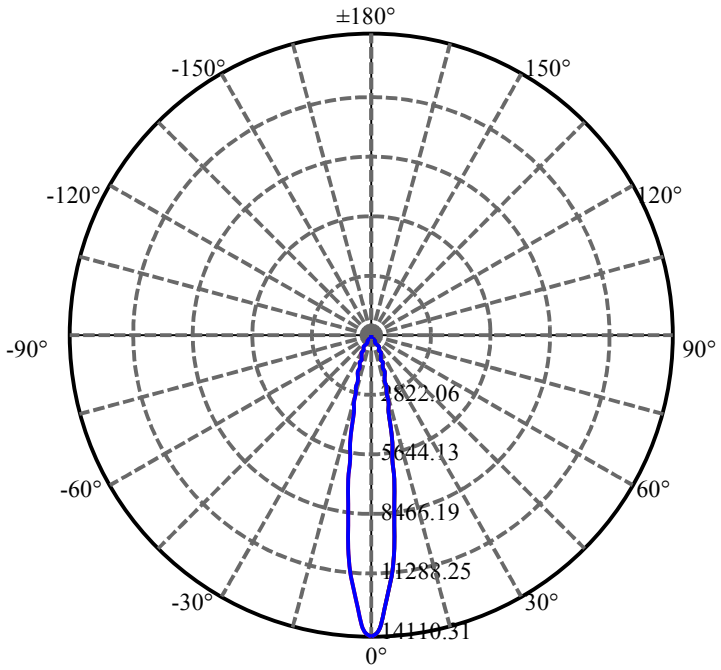
ZONAL LUMEN SUMMARY

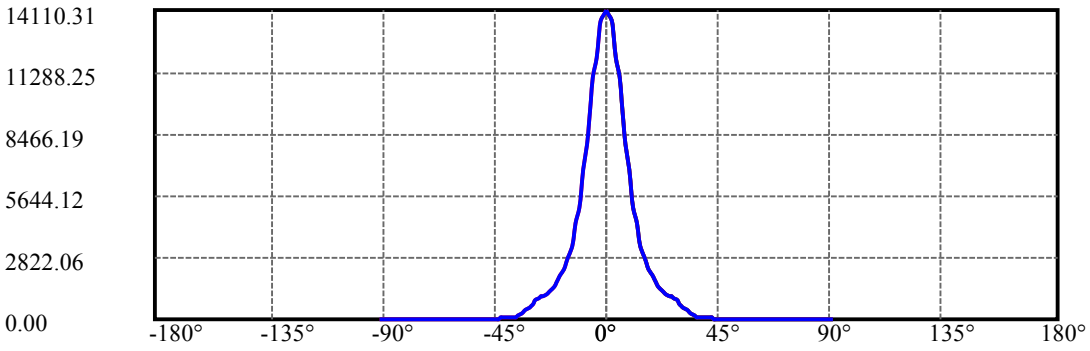
Zone	Lumens	%Lamp	%Fixt
0-30	2220.74	74.75%	90.88%
0-40	2347.61	79.02%	96.07%
0-60	2396.21	80.65%	98.06%
0-90	2442.95	82.23%	99.98%
0-120	2442.95	82.23%	99.98%
0-180	2443.52	82.25%	100.00%
60-90	48.76	1.64%	2.00%
90-120	0.00	0.00%	0.00%
90-130	0.00	0.00%	0.00%
90-150	0.00	0.00%	0.00%
90-180	0.00	0.00%	0.00%
0-23.93	1954.82	65.80%	80.00%

ZONAL LUMEN SUMMARY

0-10	938.41
10-20	802.41
20-30	479.91
30-40	126.88
40-50	27.92
50-60	20.68
60-70	19.27
70-80	15.89
80-90	11.58
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):

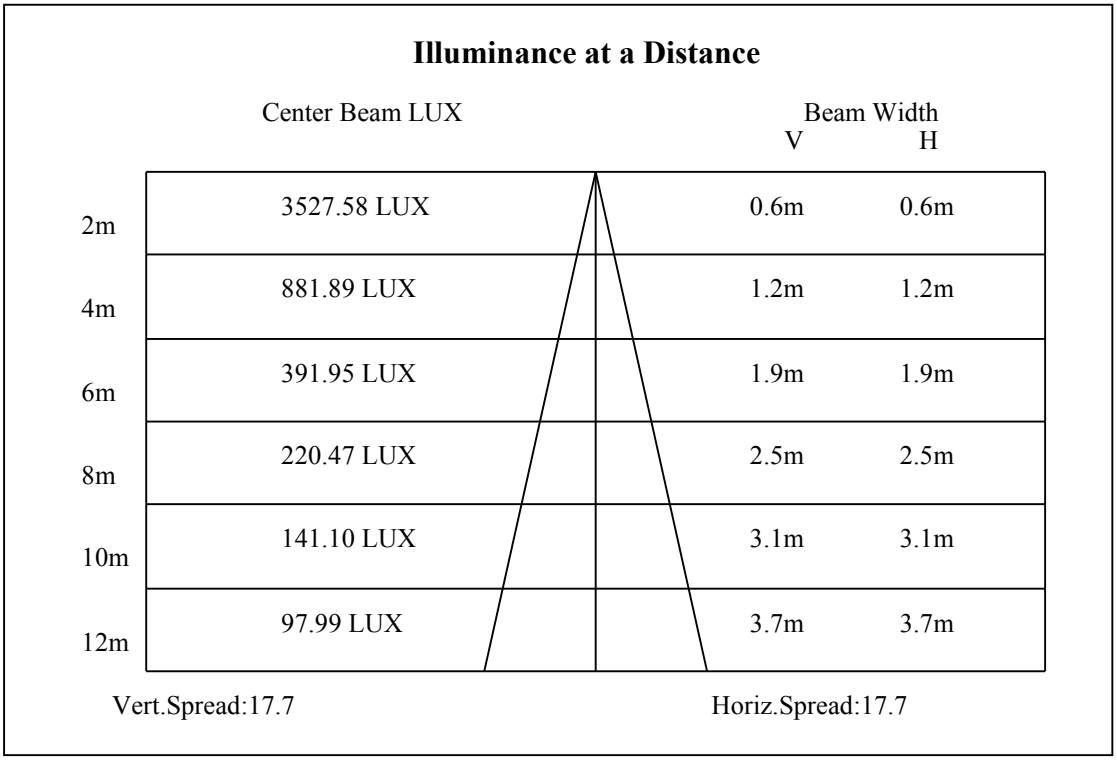
C0/C180:

C90/C270:

Field angle(10%Imax):C0/180Left:21.4 Right:21.4
:C90/270Left:21.4 Right:21.4

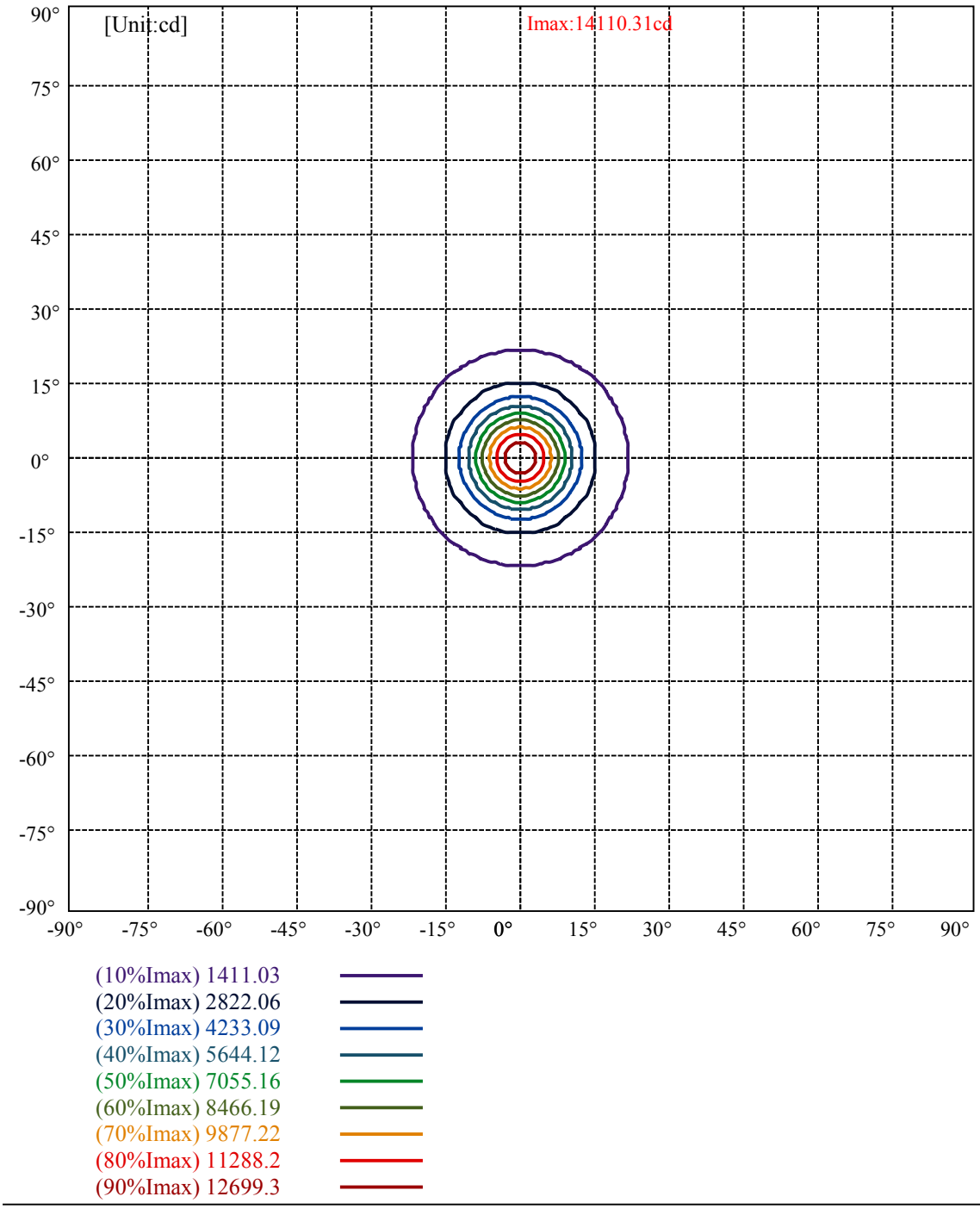
Beam Angle(50%Imax):C0/180Left:8.8 Right:8.8
:C90/270Left:8.8 Right:8.8

Lux distance Curve



Equipment: GMS1980 Date: 2019/1/17 Operator: NT07
Temperature(°C): 10.0 Humidity(%): 65.0% Distance(m): 7.50

ISO-Intensity(V-H)

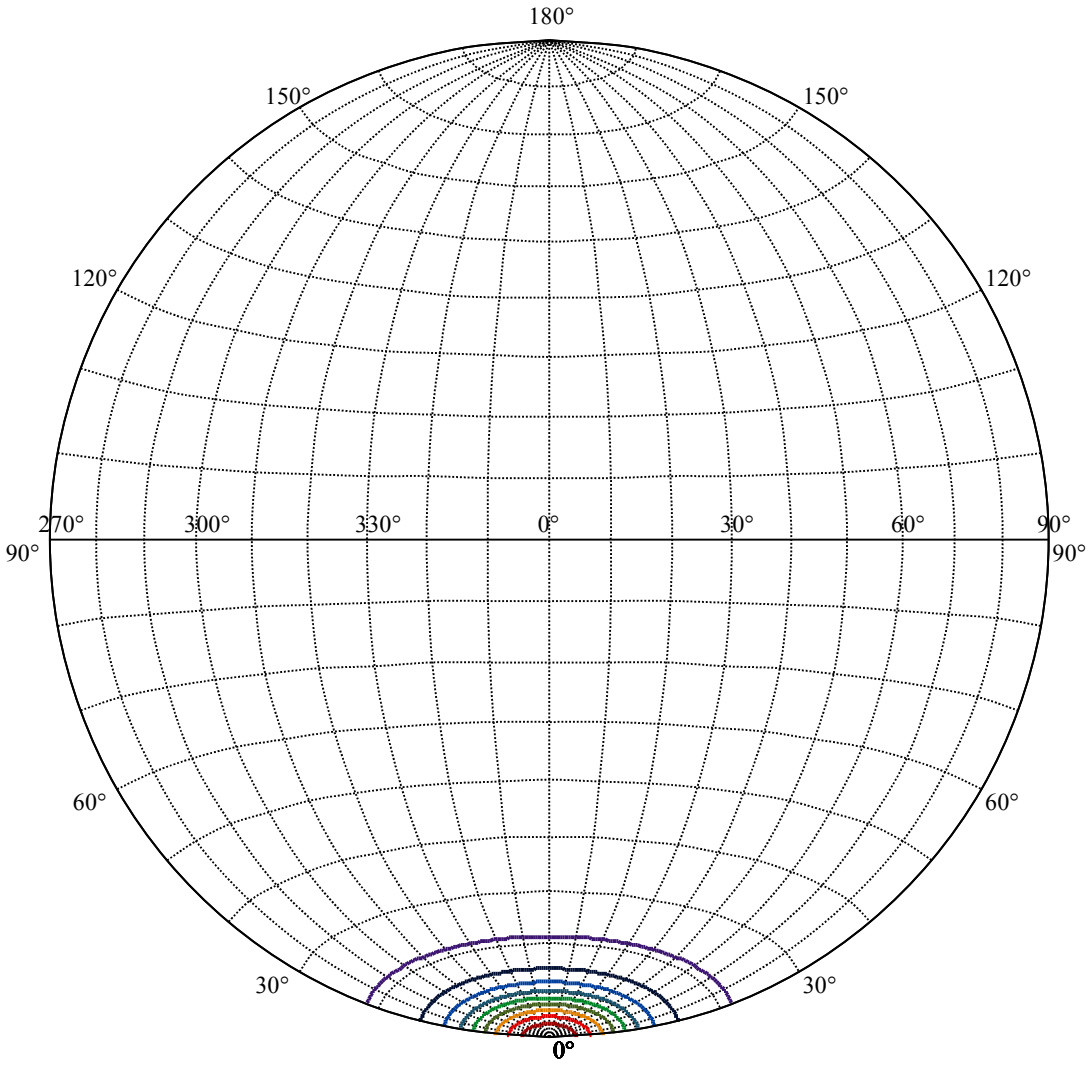


Equipment: GMS1980
Temperature(°C): 10.0

Date: 2019/1/17
Humidity(%): 65.0%

Operator: NT07
Distance(m): 7.50

ISO candela diagram on circular web



House [Unit:cd] Road

Imax:14110.31

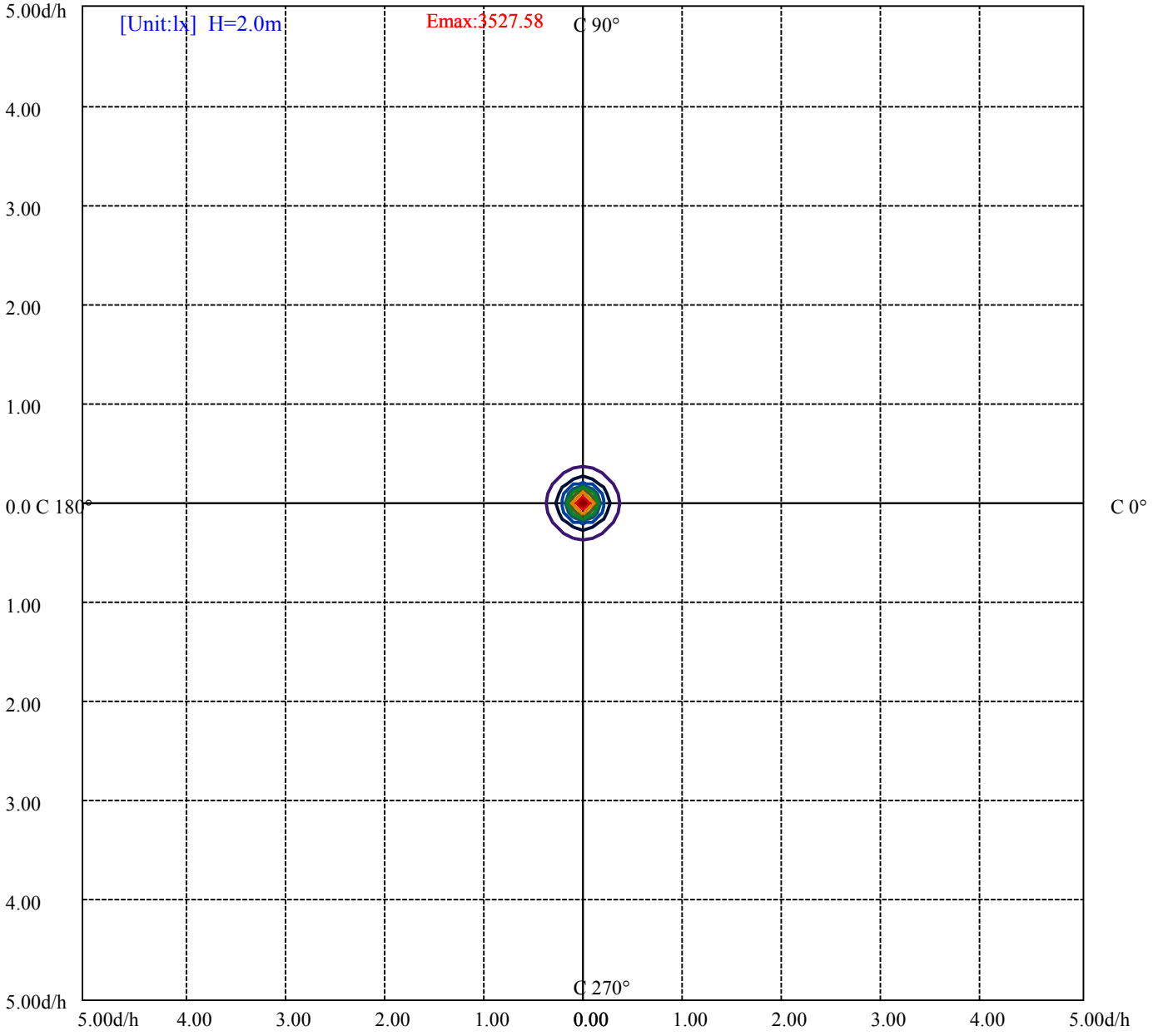
(10%Imax) 1411.03
(20%Imax) 2822.06
(30%Imax) 4233.09
(40%Imax) 5644.12
(50%Imax) 7055.16
(60%Imax) 8466.19
(70%Imax) 9877.22
(80%Imax) 11288.2
(90%Imax) 12699.3

Equipment: GMS1980
Temperature(°C): 10.0

Date: 2019/1/17
Humidity(%): 65.0%

Operator: NT07
Distance(m): 7.50

ISO illuminance diagram

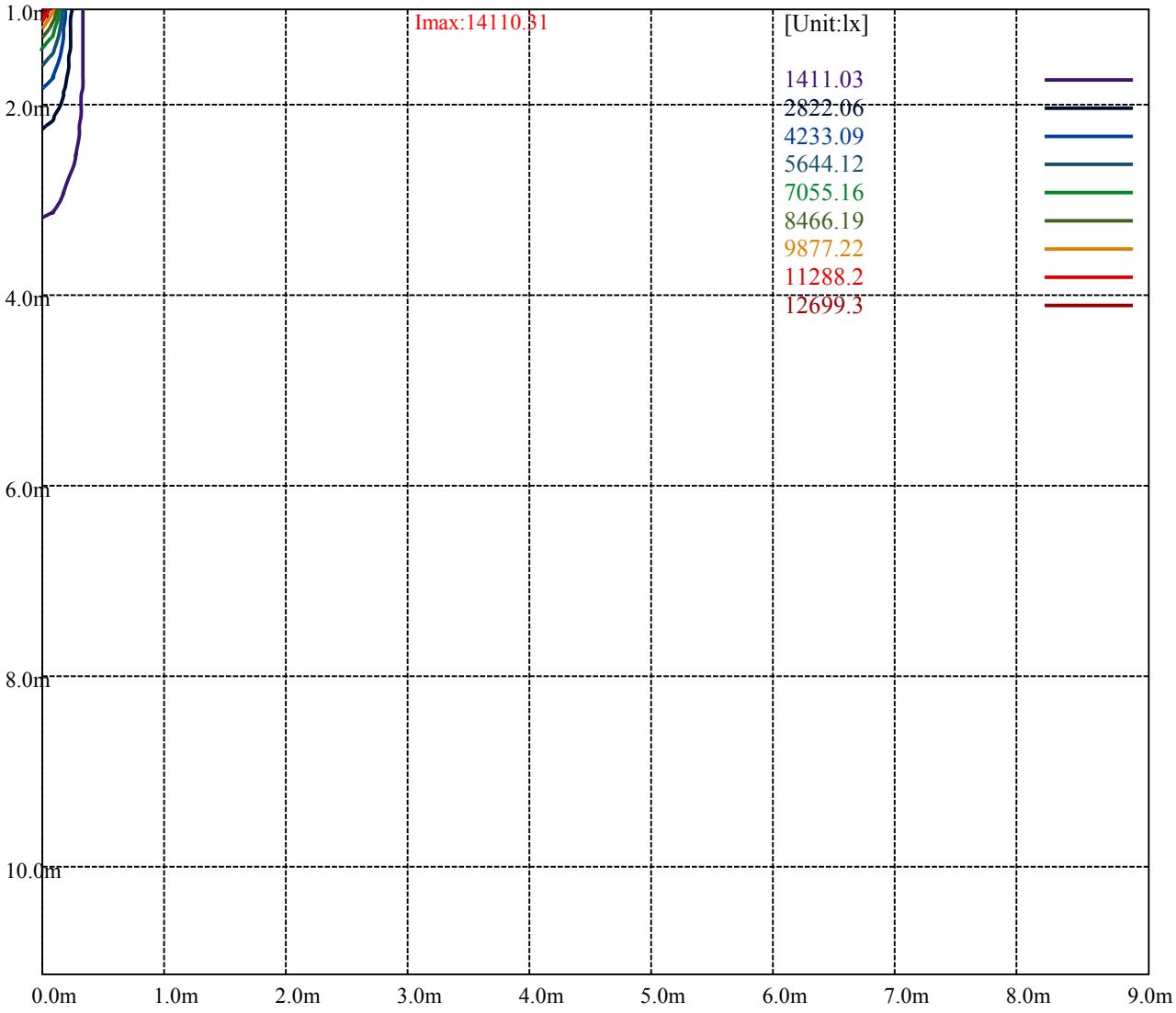


Equipment: GMS1980
Temperature(°C): 10.0

Date: 2019/1/17
Humidity(%): 65.0%

Operator: NT07
Distance(m): 7.50

Space ISO Lux diagram



Equipment: GMS1980
Temperature(°C): 10.0

Date: 2019/1/17
Humidity(%): 65.0%

Operator: NT07
Distance(m): 7.50

Luminance Limitting Curve(no luminous side)

Luminance Table

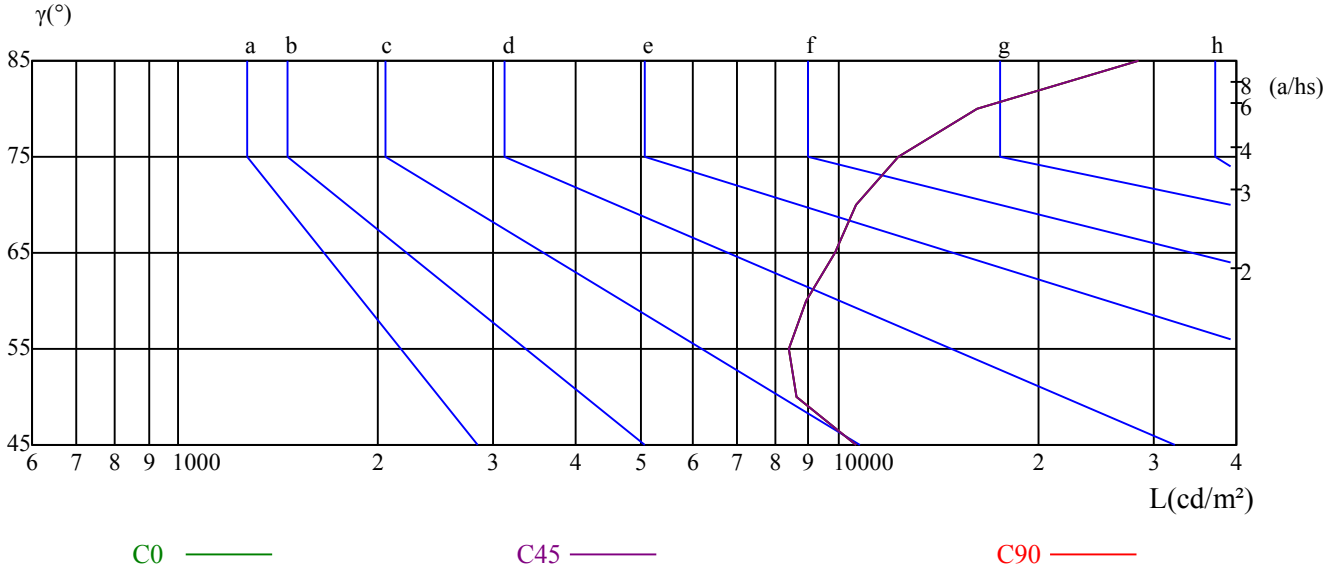
γ	45	50	55	60	65	70	75	80	85
C0	10595	8653	8381	8929	9834	10618	12285	16168	28383
C45	10595	8653	8381	8929	9834	10618	12285	16168	28383
C90	10595	8653	8381	8929	9834	10618	12285	16168	28383

L(Hor)(65)	L(Ver)(65)	L45(65)	L(Hor)(75)	L(Ver)(75)	L45(75)	L(Hor)(85)	L(Ver)(85)	L45(85)
9834	9834	9834	12285	12285	12285	28383	28383	28383

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

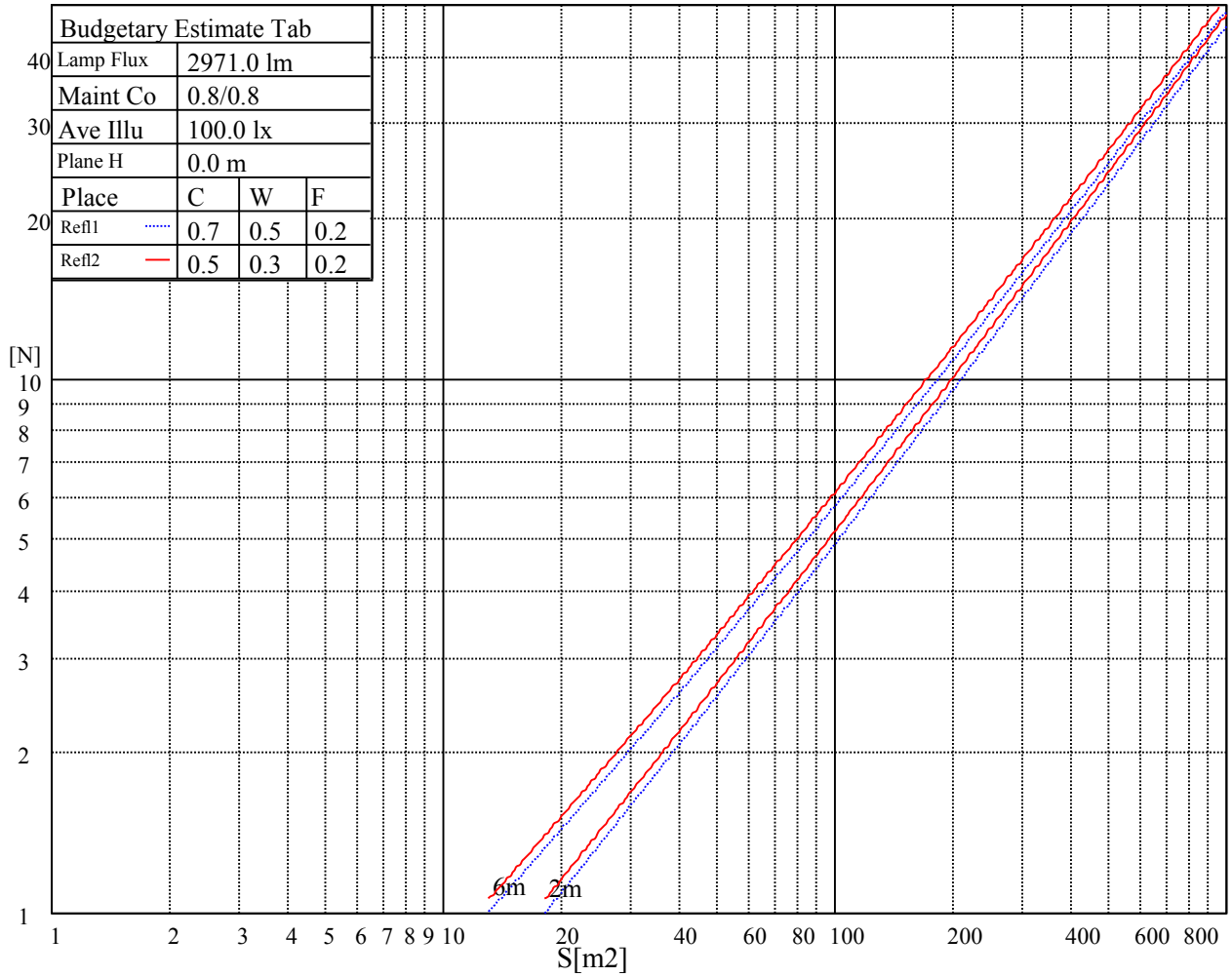
Luminance Limitting Curve



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	7.40	8.34	7.76	8.65	8.96	7.32	8.26	7.69	8.57	8.89
	3H	10.02	10.84	10.40	11.18	11.55	10.02	10.85	10.40	11.18	11.55
	4H	11.28	12.05	11.69	12.40	12.79	11.31	12.07	11.71	12.43	12.82
	6H	12.65	13.35	13.07	13.73	14.12	12.69	13.39	13.11	13.76	14.16
	8H	13.39	14.04	13.82	14.44	14.85	13.44	14.10	13.88	14.49	14.90
	12H	14.62	15.25	15.05	15.63	16.06	14.72	15.35	15.16	15.73	16.17
4H	2H	8.20	8.97	8.61	9.32	9.71	8.15	8.91	8.55	9.27	9.66
	3H	11.02	11.65	11.43	12.06	12.46	11.03	11.66	11.44	12.07	12.47
	4H	12.44	13.00	12.88	13.43	13.88	12.47	13.03	12.91	13.45	13.90
	6H	13.87	14.35	14.34	14.81	15.28	13.92	14.40	14.39	14.85	15.33
	8H	14.73	15.18	15.21	15.63	16.11	14.80	15.24	15.27	15.69	16.17
	12H	15.95	16.34	16.44	16.83	17.31	16.06	16.44	16.55	16.93	17.41
8H	4H	12.97	13.42	13.45	13.87	14.35	13.00	13.44	13.47	13.90	14.37
	6H	14.70	15.05	15.21	15.56	16.04	14.74	15.09	15.25	15.60	16.08
	8H	15.75	16.06	16.28	16.58	17.08	15.80	16.11	16.34	16.64	17.14
	12H	17.21	17.48	17.74	17.98	18.56	17.31	17.58	17.83	18.08	18.66
12H	4H	13.10	13.48	13.59	13.97	14.45	13.12	13.50	13.61	13.99	14.47
	6H	15.16	15.25	15.47	15.72	16.27	15.19	15.28	15.50	15.75	16.30
	8H	16.11	16.37	16.63	16.87	17.45	16.15	16.42	16.68	16.92	17.50

Variation with the observer position at spacings:		
S = 1.0H	3.5/-1.9	3.5/-1.9
S = 1.5H	4.4/-1.6	4.4/-1.6
S = 2.0H	5.0/-1.3	5.0/-1.3
Standard tables:	BKBF	BKBF
Uncorrected UGR	3.4	3.4

Budgetary Estimate Table

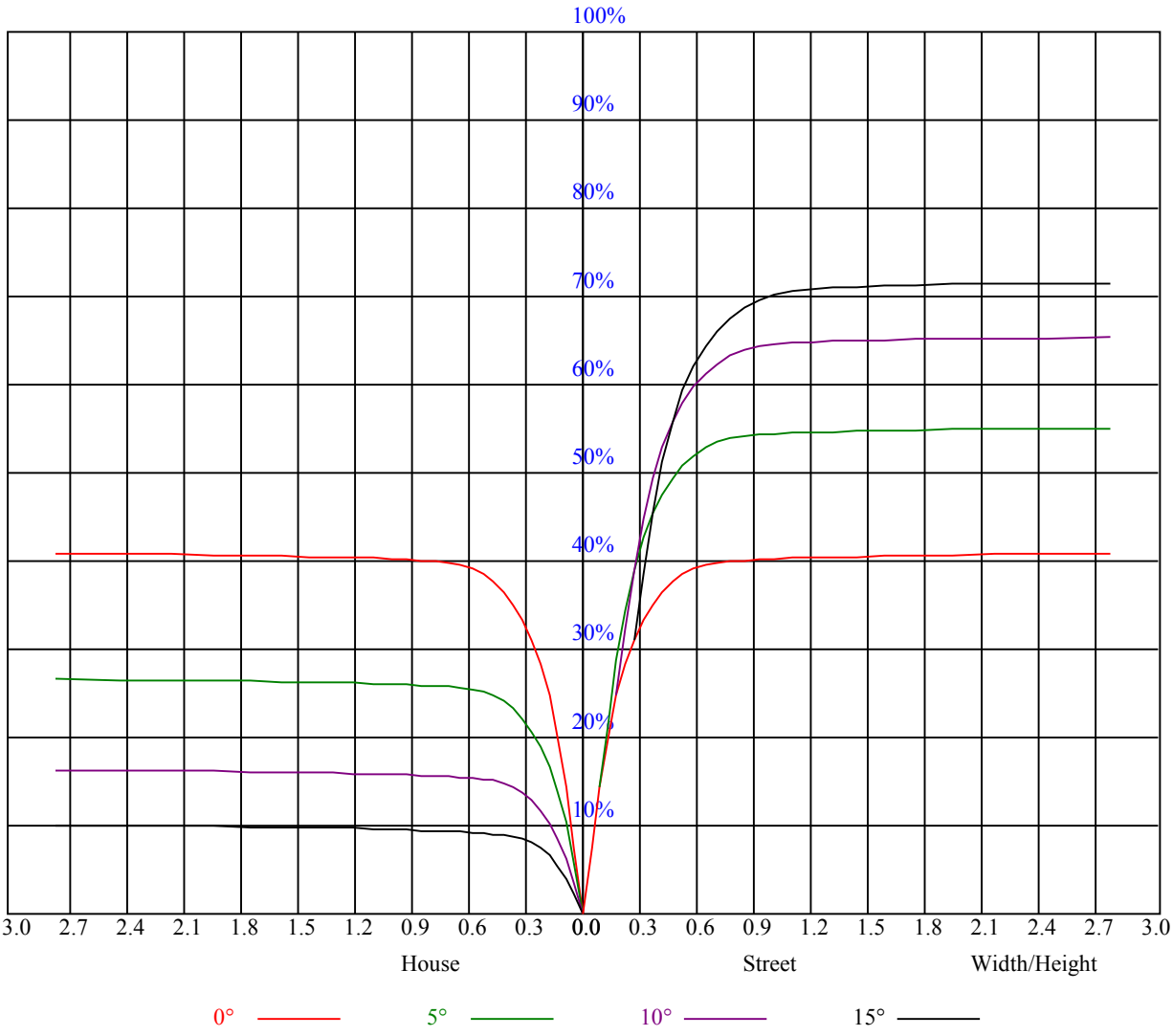


Equipment: GMS1980 Date: 2019/1/17 Operator: NT07
Temperature(°C): 10.0 Humidity(%): 65.0% Distance(m): 7.50

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	0.98	0.98	0.98	0.96	0.96	0.96	0.92	0.92	0.92	0.88	0.88	0.88	0.84	0.84	0.84	0.82
1	0.92	0.90	0.89	0.90	0.89	0.88	0.87	0.86	0.85	0.84	0.83	0.82	0.81	0.81	0.80	0.79
2	0.88	0.85	0.83	0.86	0.84	0.82	0.84	0.82	0.80	0.81	0.80	0.78	0.79	0.78	0.77	0.75
3	0.84	0.80	0.78	0.82	0.79	0.77	0.80	0.78	0.76	0.78	0.76	0.75	0.77	0.75	0.74	0.73
4	0.80	0.77	0.74	0.79	0.76	0.73	0.77	0.75	0.73	0.76	0.74	0.72	0.75	0.73	0.71	0.70
5	0.77	0.73	0.71	0.76	0.73	0.70	0.75	0.72	0.70	0.74	0.71	0.69	0.72	0.70	0.69	0.68
6	0.74	0.71	0.68	0.74	0.70	0.68	0.72	0.69	0.67	0.71	0.69	0.67	0.70	0.68	0.66	0.65
7	0.72	0.68	0.65	0.71	0.68	0.65	0.70	0.67	0.65	0.69	0.67	0.65	0.69	0.66	0.64	0.63
8	0.69	0.66	0.63	0.69	0.66	0.63	0.68	0.65	0.63	0.67	0.65	0.63	0.67	0.64	0.63	0.62
9	0.67	0.64	0.61	0.67	0.64	0.61	0.66	0.63	0.61	0.66	0.63	0.61	0.65	0.63	0.61	0.60
10	0.65	0.62	0.60	0.65	0.62	0.60	0.65	0.62	0.59	0.64	0.61	0.59	0.63	0.61	0.59	0.58

Coefficient Utilization Curve



Equipment: GMS1980	Date: 2019/1/17	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	13944.38	14287.50	14293.13	14006.25	13483.13	12588.75	11711.25	10676.25	9703.13
45.0	14208.75	14175.00	13809.38	13241.25	12442.50	11469.38	10513.13	9388.13	8375.63
90.0	14096.25	13713.75	13134.38	12183.75	11179.69	10333.13	9064.69	8042.63	7052.63
135.0	14191.88	13741.88	12999.38	12200.63	11182.50	10096.88	9084.38	7942.50	6963.75
180.0	13944.38	13381.88	12622.50	11157.19	10535.63	9523.13	8366.06	7231.50	6278.06
225.0	14208.75	13955.63	13438.13	12538.13	11195.44	10705.50	9576.56	8443.13	7443.56
270.0	14096.25	14214.38	13983.75	13500.00	12735.00	11761.88	10833.75	9736.88	8741.25
315.0	14191.88	14287.50	14141.25	13590.00	12948.75	12150.00	11119.50	10029.38	9018.00
360.0	13944.38	14287.50	14293.13	14006.25	13483.13	12588.75	11711.25	10676.25	9703.13

C/γ(°)	9.0	10.0	11.0	12.0	13.0	14.0	15.0	16.0	17.0
0.0	8589.38	7509.38	6570.00	5703.75	4747.50	4089.38	3549.38	2998.13	2857.50
45.0	7278.75	6215.63	5366.25	4623.75	3847.50	3352.50	2953.13	2682.00	2296.69
90.0	5887.13	5069.81	4363.31	3625.31	3201.75	2759.63	2369.25	2151.56	1932.75
135.0	5934.38	5028.75	4325.63	3740.63	3155.63	2874.38	2499.19	2221.88	2003.06
180.0	5317.88	4505.63	3908.25	3363.19	2964.38	2607.75	2316.94	2099.25	1906.88
225.0	6373.13	5403.94	4641.19	3922.88	3402.00	2930.63	2560.50	2298.94	2079.56
270.0	7627.50	6564.38	5698.13	4910.63	4066.88	3515.63	3065.63	2919.38	2333.25
315.0	7889.63	6802.31	5892.75	4978.69	4288.50	3657.38	3148.31	2778.75	2476.13
360.0	8589.38	7509.38	6570.00	5703.75	4747.50	4089.38	3549.38	2998.13	2857.50

C/γ(°)	18.0	19.0	20.0	21.0	22.0	23.0	24.0	25.0	26.0
0.0	2378.81	2147.63	1904.63	1738.13	1598.63	1461.38	1342.69	1254.38	1170.56
45.0	2076.75	1861.31	1681.31	1544.63	1394.44	1296.00	1195.31	1112.06	1051.31
90.0	1679.63	1545.19	1412.44	1251.56	1119.26	1081.46	1009.24	932.85	872.10
135.0	1824.19	1690.31	1499.06	1380.38	1276.88	1171.13	1095.75	1043.44	965.81
180.0	1702.13	1557.56	1423.69	1276.88	1121.91	1102.44	1028.19	951.81	869.85
225.0	1852.31	1701.00	1562.63	1407.38	1297.13	1203.19	1115.33	1047.49	985.50
270.0	2100.94	1899.56	1691.44	1544.63	1404.00	1294.31	1191.38	1120.50	1051.31
315.0	2176.31	1977.19	1800.00	1614.94	1487.25	1373.63	1253.25	1119.04	1103.12
360.0	2378.81	2147.63	1904.63	1738.13	1598.63	1461.38	1342.69	1254.38	1170.56

C/γ(°)	27.0	28.0	29.0	30.0	31.0	32.0	33.0	34.0	35.0
0.0	1092.38	1031.06	948.94	861.75	749.81	629.44	522.56	405.00	295.31
45.0	984.94	898.31	799.88	696.94	570.94	472.50	375.19	285.75	184.39
90.0	795.71	686.87	593.27	500.91	399.09	304.65	229.89	160.31	113.74
135.0	870.19	785.81	654.75	549.00	444.38	318.38	284.06	148.67	99.84
180.0	766.58	666.90	548.89	432.28	334.52	236.08	156.77	107.72	81.84
225.0	907.76	799.20	686.87	585.73	475.48	368.10	278.89	187.99	125.83
270.0	988.31	919.13	821.81	727.31	616.50	504.56	408.94	294.75	284.06
315.0	1041.02	951.53	860.79	759.94	639.73	519.19	417.04	308.25	221.63
360.0	1092.38	1031.06	948.94	861.75	749.81	629.44	522.56	405.00	295.31

C/γ(°)	36.0	37.0	38.0	39.0	40.0	41.0	42.0	43.0	44.0
0.0	284.06	142.26	91.24	73.91	66.04	57.60	52.20	48.15	43.59
45.0	123.53	92.42	72.06	64.18	57.09	52.31	47.36	43.65	39.26
90.0	85.50	74.64	67.05	59.51	54.39	49.84	45.56	41.18	38.31
135.0	79.59	72.23	63.68	58.39	54.11	48.71	44.27	40.84	37.35
180.0	70.14	62.38	56.48	51.24	46.35	42.53	39.26	35.61	33.24
225.0	88.20	73.58	65.59	58.05	52.99	48.32	44.27	39.71	36.62
270.0	144.79	98.66	74.19	66.71	59.79	53.89	48.99	44.49	40.50
315.0	143.21	95.46	74.03	65.14	57.99	52.59	48.32	43.82	40.28
360.0	284.06	142.26	91.24	73.91	66.04	57.60	52.20	48.15	43.59

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	39.71	36.79	33.98	31.84	29.59	28.18	26.66	25.65	24.58
45.0	35.94	33.92	31.28	29.48	28.07	26.49	25.54	24.75	23.85
90.0	35.78	33.19	31.22	29.81	28.07	27.11	26.10	25.26	24.53
135.0	34.65	32.40	30.49	29.03	27.56	26.49	25.65	24.86	24.08
180.0	31.16	29.25	27.96	26.61	25.59	24.64	23.91	23.29	22.95
225.0	33.81	31.22	29.03	27.90	26.27	25.20	24.41	23.63	22.95
270.0	37.07	34.26	31.78	29.81	28.29	26.66	25.54	24.75	23.85
315.0	37.24	34.54	32.12	30.09	28.69	27.06	25.99	25.03	24.30
360.0	39.71	36.79	33.98	31.84	29.59	28.18	26.66	25.65	24.58

C/γ(°)	54.0	55.0	56.0	57.0	58.0	59.0	60.0	61.0	62.0
0.0	23.85	23.23	22.73	22.33	21.99	21.71	21.32	21.15	20.98
45.0	23.29	22.95	22.44	22.16	21.94	21.54	21.32	21.15	20.87
90.0	24.02	23.46	23.01	22.61	22.11	21.77	21.54	20.98	20.70
135.0	23.79	23.34	22.95	22.67	22.33	22.11	21.77	21.43	21.26
180.0	22.44	22.05	21.88	21.60	21.38	21.15	20.81	20.76	20.59
225.0	22.61	22.22	21.77	21.66	21.26	20.98	20.81	20.48	20.42
270.0	23.23	22.73	22.28	21.88	21.66	21.38	21.09	20.98	20.70
315.0	23.68	23.12	22.73	22.33	21.99	21.66	21.38	21.09	20.87
360.0	23.85	23.23	22.73	22.33	21.99	21.71	21.32	21.15	20.98

C/γ(°)	63.0	64.0	65.0	66.0	67.0	68.0	69.0	70.0	71.0
0.0	20.64	20.59	20.42	20.03	19.63	19.18	18.62	18.17	17.66
45.0	20.70	20.42	19.91	19.46	18.90	18.28	17.83	17.33	16.82
90.0	20.42	19.74	19.29	18.68	18.11	17.78	17.21	16.76	16.37
135.0	20.87	20.31	19.80	19.18	18.62	18.11	17.61	17.21	16.59
180.0	20.14	19.69	19.18	18.56	18.11	17.55	17.16	16.71	16.20
225.0	20.14	19.69	19.29	18.84	18.11	17.78	17.27	16.76	16.43
270.0	20.59	20.48	20.08	19.58	19.24	18.56	18.11	17.66	17.16
315.0	20.70	20.64	20.31	19.80	19.29	18.73	18.28	17.72	17.27
360.0	20.64	20.59	20.42	20.03	19.63	19.18	18.62	18.17	17.66

C/γ(°)	72.0	73.0	74.0	75.0	76.0	77.0	78.0	79.0	80.0
0.0	17.27	16.88	16.37	15.92	15.53	15.13	14.63	14.34	14.01
45.0	16.43	15.92	15.53	15.08	14.68	14.29	13.95	13.61	13.28
90.0	15.86	15.41	15.08	14.68	14.23	13.95	13.67	13.28	12.99
135.0	16.14	15.75	15.30	14.91	14.57	14.18	13.78	13.50	13.16
180.0	15.81	15.30	14.96	14.63	14.23	13.89	13.61	13.28	12.99
225.0	15.86	15.53	15.19	14.79	14.34	14.06	13.78	13.39	13.05
270.0	16.76	16.37	15.92	15.47	15.13	14.74	14.34	14.06	13.73
315.0	16.93	16.37	15.98	15.64	15.13	14.74	14.46	14.01	13.73
360.0	17.27	16.88	16.37	15.92	15.53	15.13	14.63	14.34	14.01

C/γ(°)	81.0	82.0	83.0	84.0	85.0	86.0	87.0	88.0	89.0
0.0	13.67	13.33	12.99	12.71	12.43	12.09	11.87	11.53	11.31
45.0	12.94	12.66	12.32	12.04	11.70	11.42	11.08	10.86	10.52
90.0	12.77	12.43	12.21	11.70	11.25	10.91	10.69	10.41	10.24
135.0	12.88	12.60	12.26	11.98	11.64	11.36	11.03	10.58	10.41
180.0	12.71	12.38	12.09	11.81	11.64	11.31	10.80	10.58	10.46
225.0	12.77	12.43	12.15	11.87	11.59	11.31	11.08	10.74	10.35
270.0	13.33	12.99	12.60	12.26	11.87	11.48	11.14	10.86	10.58
315.0	13.39	13.05	12.71	12.38	12.09	11.81	11.53	11.31	10.97
360.0	13.67	13.33	12.99	12.71	12.43	12.09	11.87	11.53	11.31

Intensity data(cd)

C/γ(°)	90.0
0.0	10.97
45.0	10.24
90.0	10.24
135.0	10.35
180.0	10.41
225.0	10.24
270.0	10.29
315.0	10.52
360.0	10.97