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NATA

LumCAT: 2-1120-A3
Luminaire: 99.02.73.172+92.76.365.00

Report No: NATA0100	Voltage(V): 35.0000
Test No: GC2019011513	Current(A): 0.5000
LampCAT: CITIZEN CLU720	Power (W): 17.5000
Lamp flux(lm): 1995.0	PF: 0.0000
Number of Lamps: 1	Ballast type: DC
Length(mm): 71	Width(mm): 71
Phm Type: C	Height(mm): 0

Photometric Results

Lumens(lm): 1829.80
Efficiency(%): 91.72%
Lumens(lm)/Power(W): 104.81
Central intensity(cd): 18855.000
Maximum intensity(cd): 18855.000
Angle of maximum intensity: C=0.0 γ=0.0
Beam Angle(50%Imax): [C0/180]Total=12.0
[C90/270]Total=12.0
Field angle(10%Imax): [C0/180]Total=23.9
[C90/270]Total=23.9
Maximum s/h(1/2): C0_180=0.21 C90_270=0.21
Maximum s/h(1/4): C0_180=0.21 C90_270=0.21
Up flux rate of lamp(%): 0.00%
Down flux rate of lamp(%): 91.94%
Up flux rate of LUM(%): - -
Down flux rate of LUM(%): 100.00%
CIE Type : Direct lighting
Output flux ratio in π solid angle : 98.537%

Equipment: GMS1980	Date: 2019/1/15	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	18855.000	4.511	4.511	.226%	.247%
1.0	18507.656	35.421	39.932	1.775%	2.182%
2.0	17522.578	67.061	106.993	3.361%	5.847%
3.0	16000.313	91.829	198.822	4.603%	10.866%
4.0	13736.883	105.081	303.903	5.267%	16.608%
5.0	11828.109	113.048	416.951	5.667%	22.787%
6.0	9418.570	107.962	524.913	5.412%	28.687%
7.0	7344.773	98.158	623.071	4.920%	34.051%
8.0	5544.633	84.621	707.692	4.242%	38.676%
9.0	4042.406	69.346	777.038	3.476%	42.466%
10.0	3088.266	58.808	835.846	2.948%	45.680%
11.0	2370.938	49.610	885.457	2.487%	48.391%
12.0	1863.352	42.484	927.941	2.130%	50.713%
13.0	1559.250	38.464	966.405	1.928%	52.815%
14.0	1336.809	35.465	1001.869	1.778%	54.753%
15.0	1175.541	33.365	1035.234	1.672%	56.576%
16.0	1066.064	32.224	1067.457	1.615%	58.337%
17.0	984.537	31.566	1099.023	1.582%	60.062%
18.0	915.785	31.033	1130.057	1.556%	61.758%
19.0	863.599	30.832	1160.889	1.545%	63.443%
20.0	822.108	30.834	1191.723	1.546%	65.128%
21.0	788.358	30.982	1222.705	1.553%	66.822%
22.0	759.227	31.189	1253.894	1.563%	68.526%
23.0	733.830	31.443	1285.337	1.576%	70.245%
24.0	712.568	31.783	1317.119	1.593%	71.981%
25.0	694.786	32.200	1349.319	1.614%	73.741%
26.0	681.230	32.748	1382.067	1.642%	75.531%
27.0	669.059	33.309	1415.376	1.670%	77.351%
28.0	658.181	33.885	1449.261	1.698%	79.203%
29.0	647.726	34.436	1483.697	1.726%	81.085%
30.0	637.313	34.944	1518.642	1.752%	82.995%
31.0	627.743	35.455	1554.096	1.777%	84.932%
32.0	617.456	35.881	1589.977	1.799%	86.893%
33.0	602.986	36.014	1625.991	1.805%	88.862%
34.0	574.840	35.250	1661.241	1.767%	90.788%
35.0	520.369	32.731	1693.972	1.641%	92.577%
36.0	444.291	28.638	1722.61	1.435%	94.142%
37.0	363.748	24.006	1746.615	1.203%	95.454%

Zonal flux distribution table

γ(°)	Average I(cd)	Zonal F(lm)	Sum F(lm)	Eff Flux(%)	Eff Sum(%)
38.0	281.123	18.980	1765.595	.951%	96.491%
39.0	196.327	13.549	1779.144	.679%	97.231%
40.0	108.506	7.648	1786.792	.383%	97.649%
41.0	55.807	4.015	1790.807	.201%	97.869%
42.0	27.197	1.996	1792.803	.100%	97.978%
43.0	18.886	1.412	1794.215	.071%	98.055%
44.0	16.362	1.246	1795.462	.062%	98.123%
45.0	13.549	1.051	1796.512	.053%	98.181%
46.0	11.398	0.899	1797.411	.045%	98.230%
47.0	10.005	0.802	1798.214	.040%	98.274%
48.0	9.274	0.756	1798.97	.038%	98.315%
49.0	8.712	0.721	1799.691	.036%	98.354%
50.0	8.332	0.700	1800.391	.035%	98.393%
51.0	8.163	0.696	1801.086	.035%	98.431%
52.0	8.030	0.694	1801.78	.035%	98.469%
53.0	7.938	0.695	1802.475	.035%	98.507%
54.0	7.854	0.697	1803.172	.035%	98.545%
55.0	7.784	0.699	1803.871	.035%	98.583%
56.0	7.713	0.701	1804.573	.035%	98.621%
57.0	7.643	0.703	1805.276	.035%	98.660%
58.0	7.601	0.707	1805.982	.035%	98.698%
59.0	7.545	0.709	1806.692	.036%	98.737%
60.0	7.502	0.712	1807.404	.036%	98.776%
61.0	7.488	0.718	1808.122	.036%	98.815%
62.0	7.439	0.720	1808.843	.036%	98.854%
63.0	7.418	0.725	1809.567	.036%	98.894%
64.0	7.390	0.728	1810.296	.037%	98.934%
65.0	7.362	0.732	1811.027	.037%	98.974%
66.0	7.341	0.735	1811.763	.037%	99.014%
67.0	7.327	0.740	1812.502	.037%	99.054%
68.0	7.305	0.743	1813.245	.037%	99.095%
69.0	7.298	0.747	1813.992	.037%	99.136%
70.0	7.270	0.749	1814.742	.038%	99.177%
71.0	7.263	0.753	1815.495	.038%	99.218%
72.0	7.249	0.756	1816.251	.038%	99.259%
73.0	7.242	0.759	1817.01	.038%	99.301%
74.0	7.214	0.760	1817.771	.038%	99.342%
75.0	7.214	0.764	1818.535	.038%	99.384%

Zonal flux distribution table

γ(°)	Average I(cd)	Zonal F(lm)	Sum F(lm)	Eff Flux(%)	Eff Sum(%)
76.0	7.207	0.767	1819.302	.038%	99.426%
77.0	7.200	0.769	1820.071	.039%	99.468%
78.0	7.200	0.772	1820.843	.039%	99.510%
79.0	7.186	0.774	1821.617	.039%	99.553%
80.0	7.186	0.776	1822.393	.039%	99.595%
81.0	7.179	0.778	1823.17	.039%	99.638%
82.0	7.158	0.777	1823.948	.039%	99.680%
83.0	7.151	0.778	1824.726	.039%	99.723%
84.0	7.172	0.782	1825.508	.039%	99.765%
85.0	7.151	0.781	1826.289	.039%	99.808%
86.0	7.172	0.785	1827.074	.039%	99.851%
87.0	7.137	0.782	1827.855	.039%	99.894%
88.0	7.116	0.780	1828.635	.039%	99.936%
89.0	7.102	0.779	1829.414	.039%	99.979%
90.0	7.102	0.389	1829.803	.020%	100.000%

Zonal flux distribution table

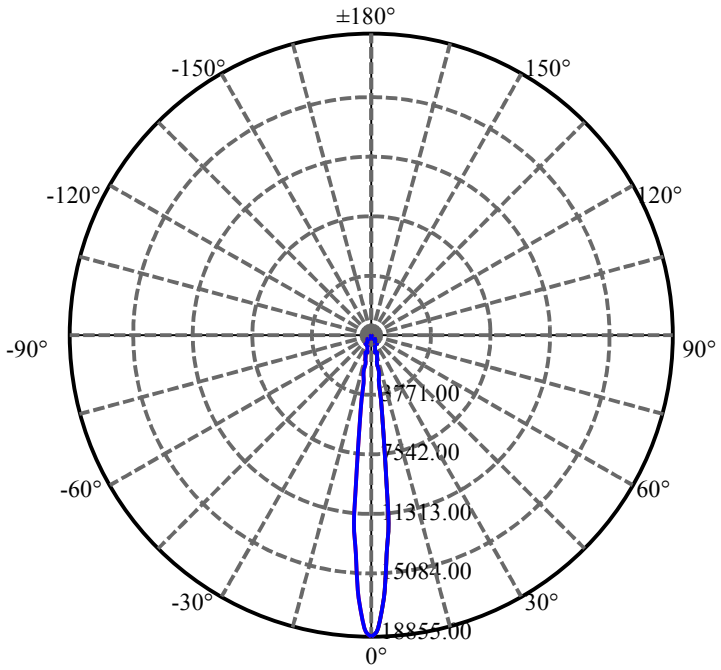
ZONAL LUMEN SUMMARY

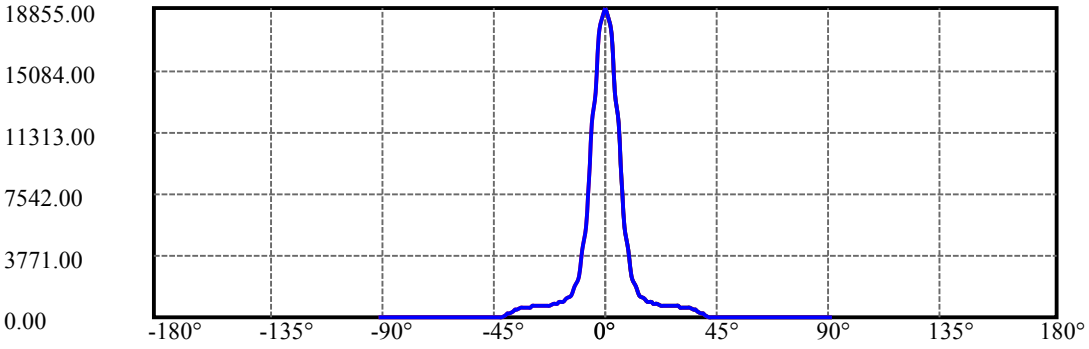
Zone	Lumens	%Lamp	%Fixt
0-30	1518.64	76.12%	82.99%
0-40	1786.79	89.56%	97.65%
0-60	1807.40	90.60%	98.78%
0-90	1829.41	91.70%	99.98%
0-120	1829.41	91.70%	99.98%
0-180	1829.80	91.72%	100.00%
60-90	22.72	1.14%	1.24%
90-120	0.00	0.00%	0.00%
90-130	0.00	0.00%	0.00%
90-150	0.00	0.00%	0.00%
90-180	0.00	0.00%	0.00%
0-28.42	1463.84	73.38%	80.00%

ZONAL LUMEN SUMMARY

0-10	835.85
10-20	355.88
20-30	326.92
30-40	268.15
40-50	13.60
50-60	7.01
60-70	7.34
70-80	7.65
80-90	7.02
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:12.0 Right:12.0
:C90/270Left:12.0 Right:12.0

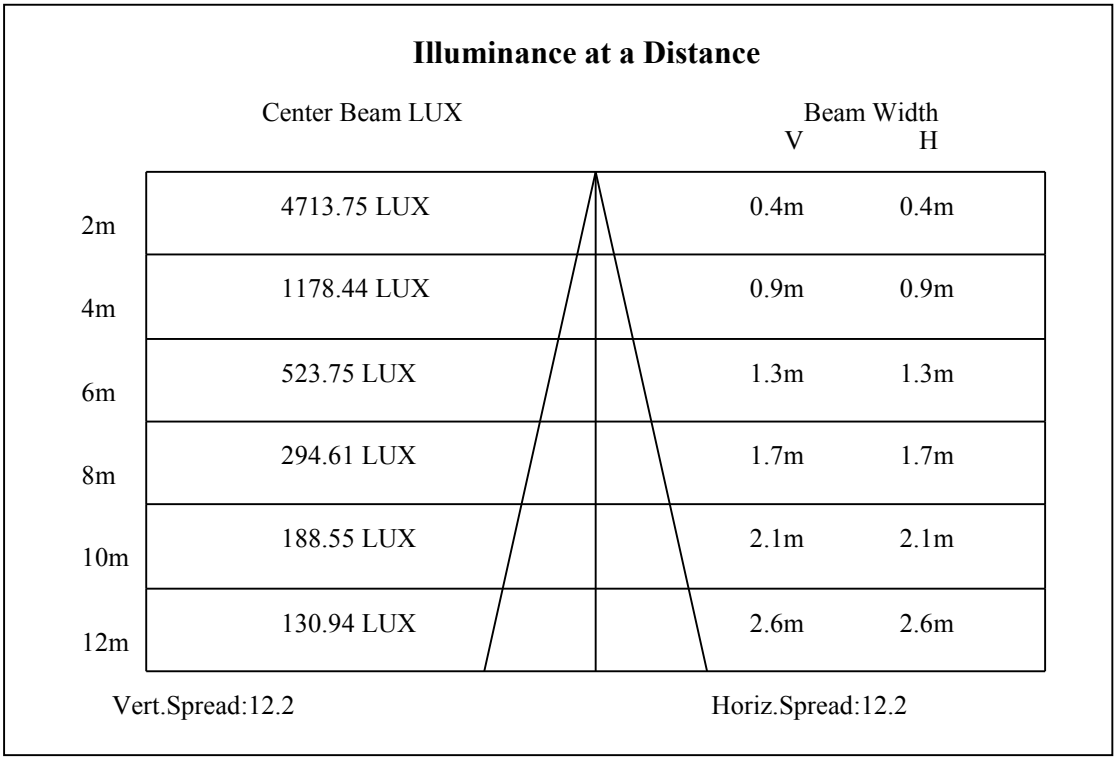
Beam Angle(50%Imax):C0/180Left:6.0 Right:6.0
:C90/270Left:6.0 Right:6.0

Equipment: GMS1980
Temperature(°C): 10.0

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

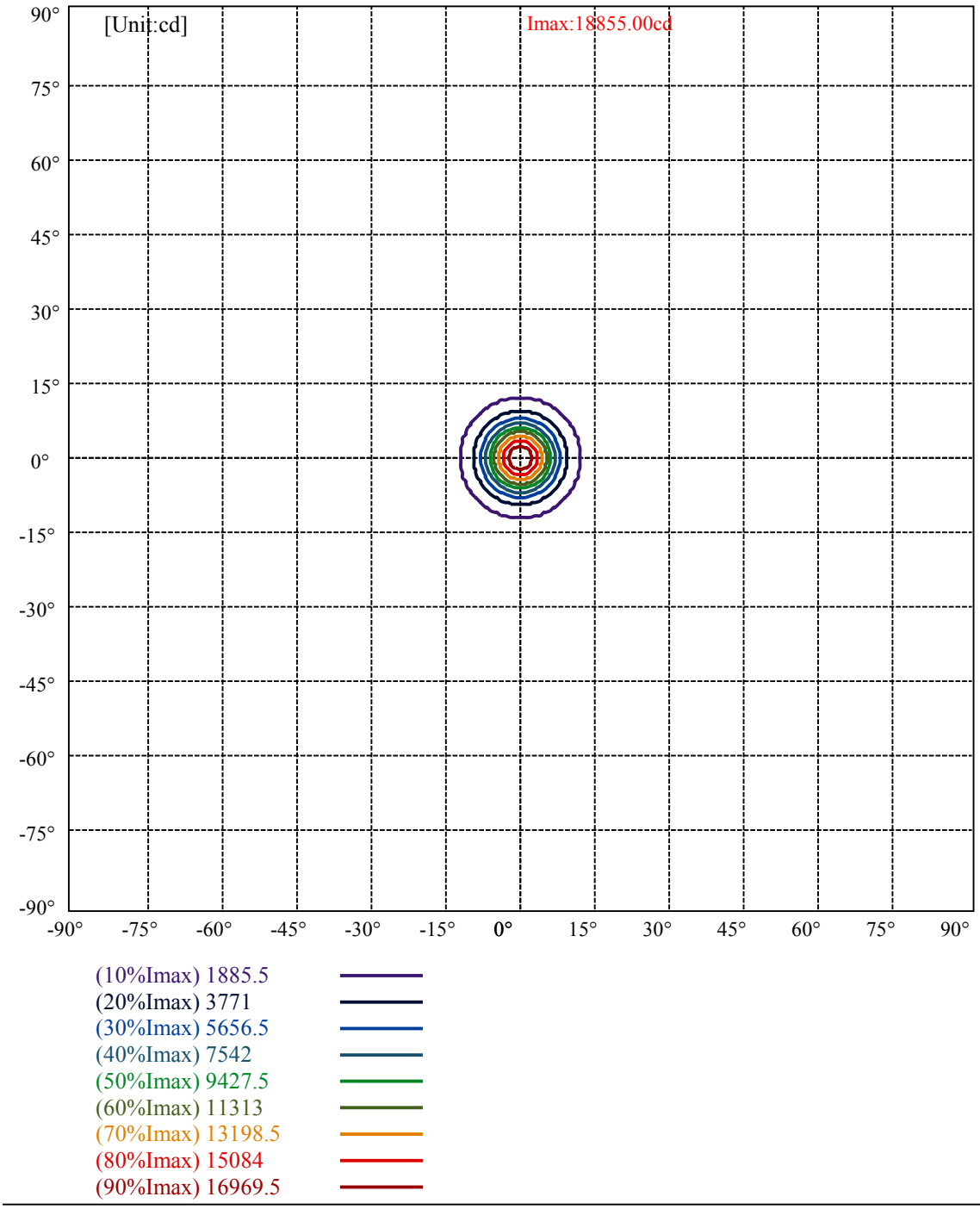
Operator: NT07
Distance(m): 7.50

Lux distance Curve



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

ISO-Intensity(V-H)

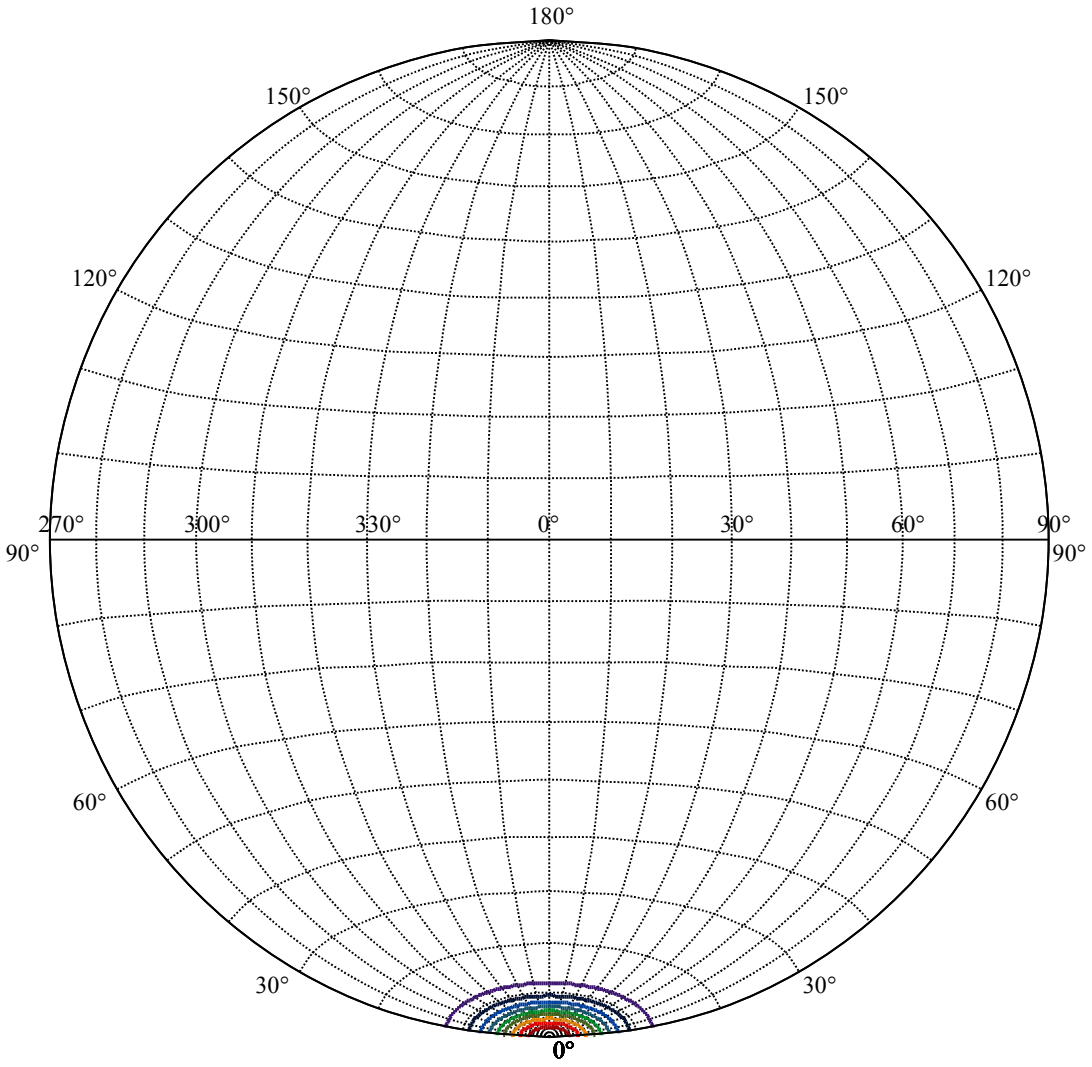


Equipment: GMS1980
Temperature(°C): 10.0

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

Operator: NT07
Distance(m): 7.50

ISO candela diagram on circular web



House [Unit:cd] Road

Imax:18855.00

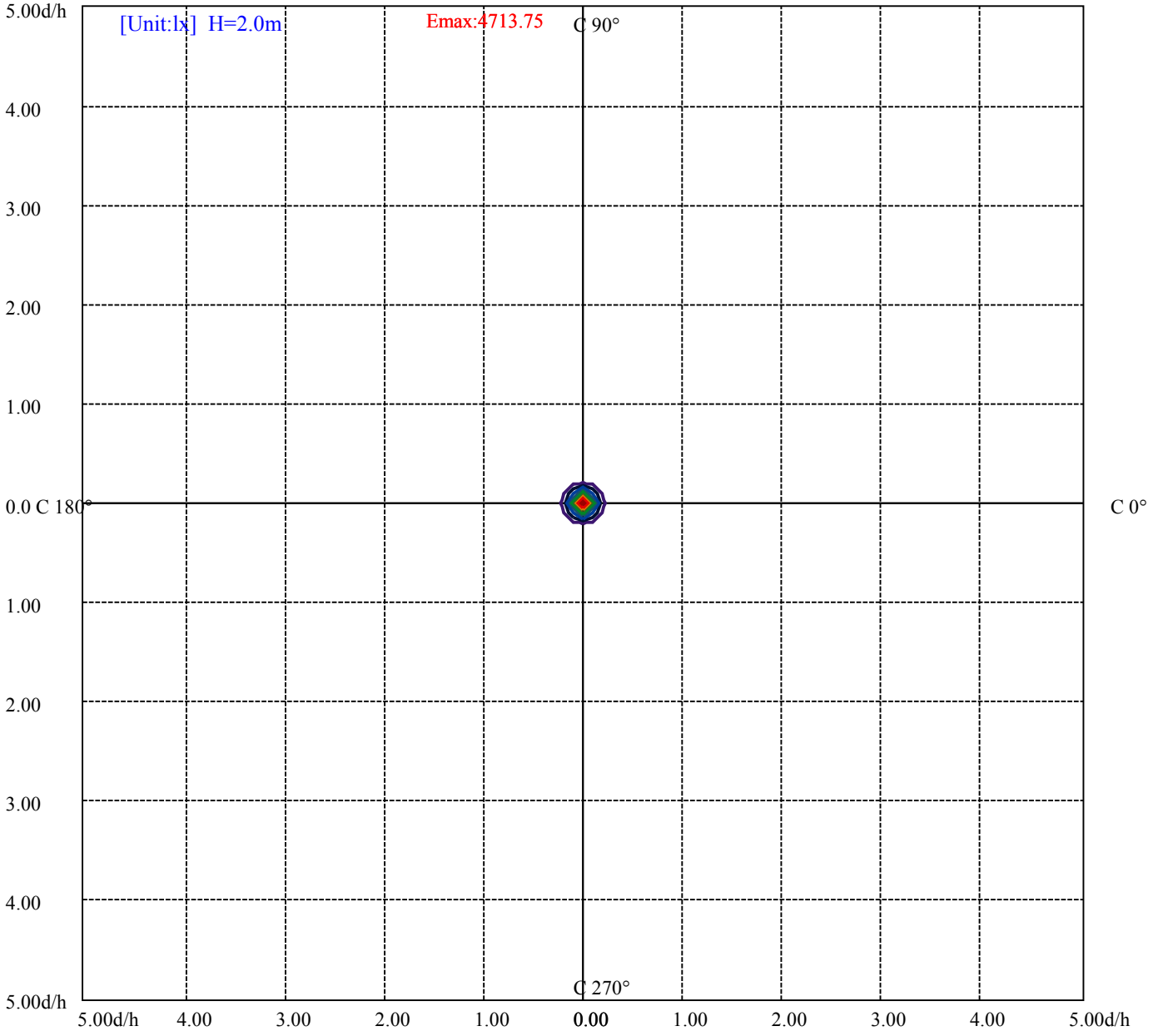
(10%Imax) 1885.5
(20%Imax) 3771
(30%Imax) 5656.5
(40%Imax) 7542
(50%Imax) 9427.5
(60%Imax) 11313
(70%Imax) 13198.5
(80%Imax) 15084
(90%Imax) 16969.5

Equipment: GMS1980
Temperature(°C): 10.0

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

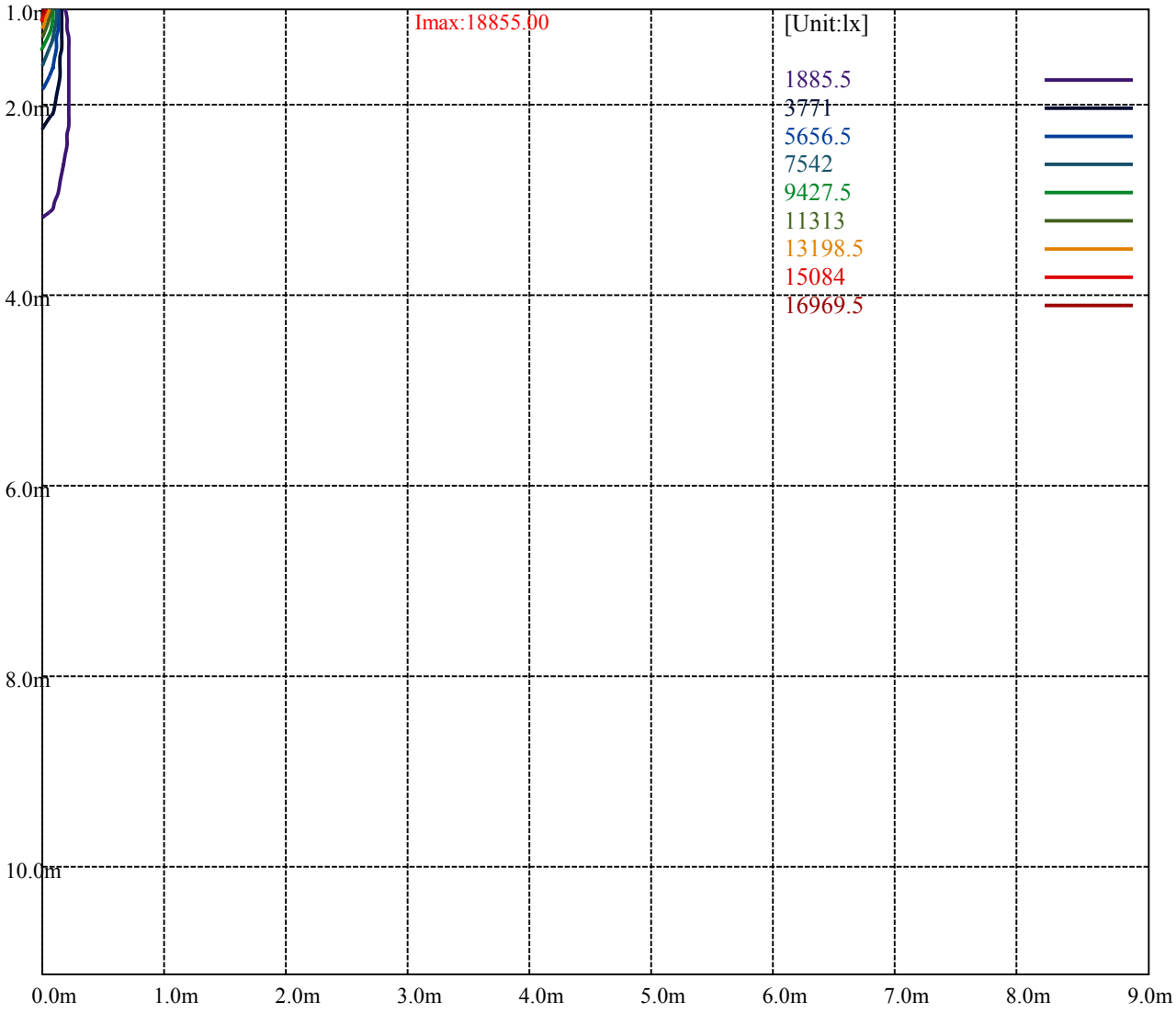
Operator: NT07
Distance(m): 7.50

ISO illuminance diagram



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

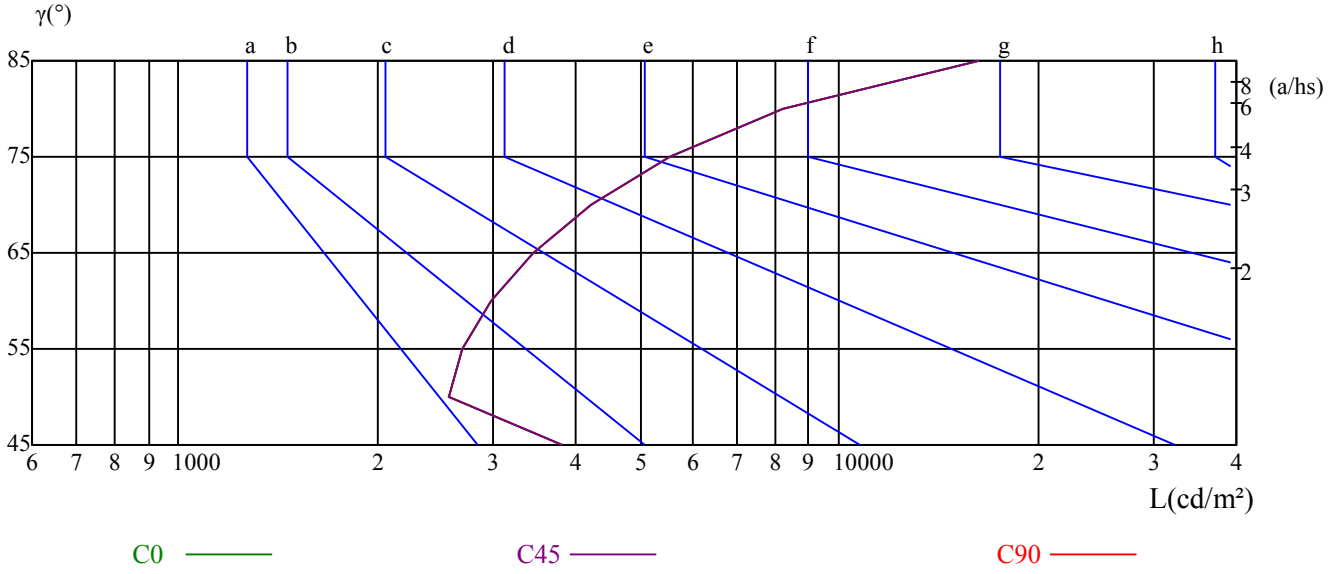
γ	45	50	55	60	65	70	75	80	85
C0	3801	2571	2692	2977	3456	4217	5529	8209	16276
C45	3801	2571	2692	2977	3456	4217	5529	8209	16276
C90	3801	2571	2692	2977	3456	4217	5529	8209	16276

L(Hor)(65)	L(Ver)(65)	L45(65)	L(Hor)(75)	L(Ver)(75)	L45(75)	L(Hor)(85)	L(Ver)(85)	L45(85)
3456	3456	3456	5529	5529	5529	16276	16276	16276

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

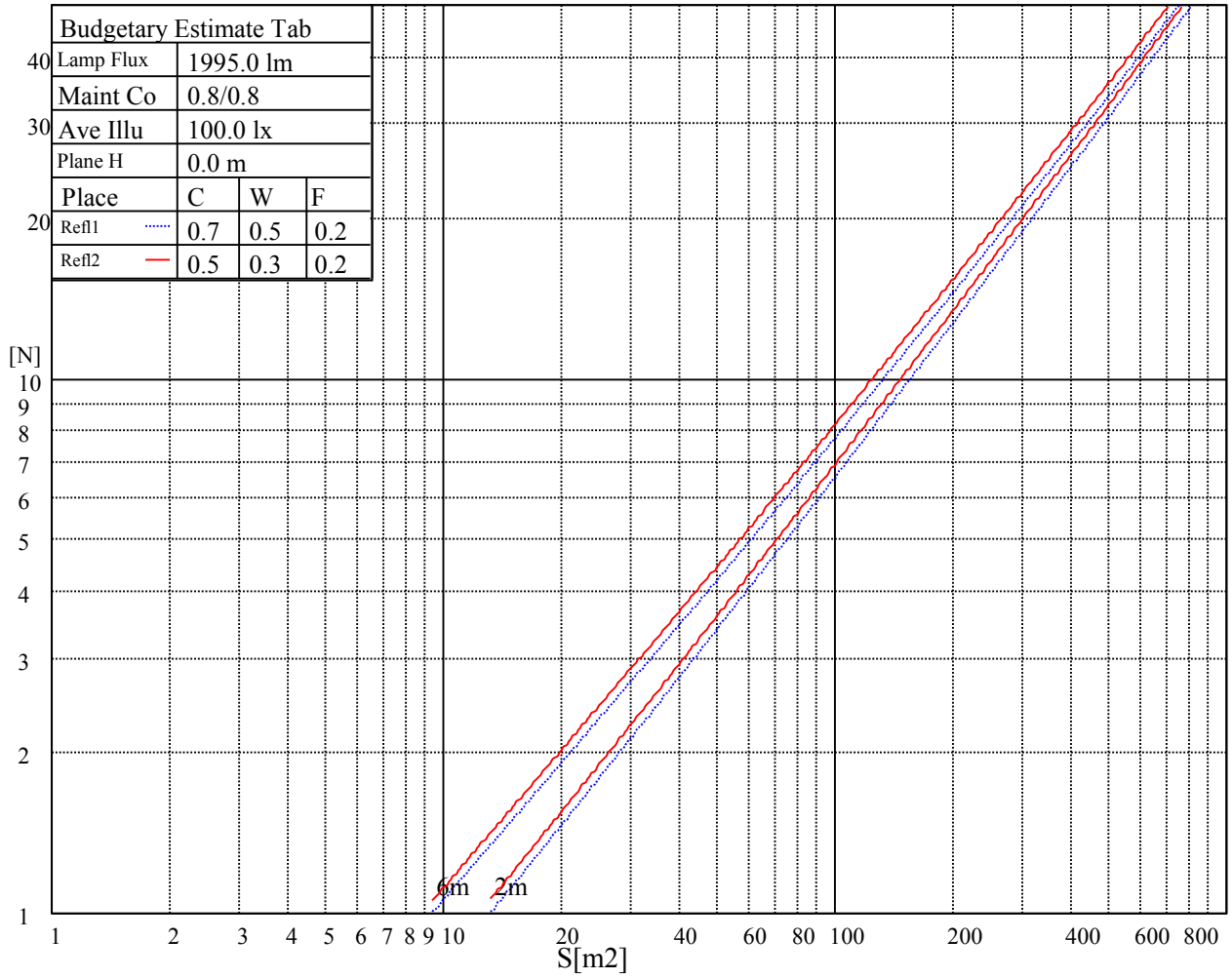


UGR Glare

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	1.87	2.77	2.23	3.08	3.40	1.84	2.75	2.21	3.06	3.38
	3H	5.18	5.98	5.57	6.32	6.69	5.15	5.95	5.53	6.28	6.65
	4H	7.00	7.74	7.41	8.09	8.49	6.95	7.68	7.35	8.04	8.43
	6H	9.01	9.69	9.43	10.06	10.46	8.96	9.64	9.38	10.01	10.41
	8H	10.12	10.75	10.55	11.14	11.55	10.07	10.70	10.51	11.10	11.51
	12H	11.90	12.50	12.33	12.88	13.32	11.86	12.47	12.30	12.85	13.28
4H	2H	2.80	3.54	3.21	3.89	4.29	2.79	3.53	3.20	3.88	4.27
	3H	6.35	6.96	6.77	7.37	7.77	6.32	6.93	6.74	7.34	7.74
	4H	8.32	8.86	8.76	9.29	9.74	8.28	8.82	8.72	9.25	9.70
	6H	10.49	10.96	10.97	11.41	11.88	10.45	10.91	10.93	11.37	11.84
	8H	11.69	12.12	12.17	12.58	13.05	11.66	12.09	12.14	12.54	13.02
	12H	13.37	13.74	13.86	14.23	14.71	13.34	13.71	13.83	14.20	14.68
8H	4H	9.05	9.48	9.53	9.94	10.41	9.02	9.45	9.50	9.91	10.38
	6H	11.50	11.83	12.01	12.34	12.83	11.46	11.80	11.98	12.31	12.79
	8H	12.88	13.18	13.42	13.71	14.21	12.86	13.16	13.39	13.68	14.18
	12H	14.69	14.95	15.22	15.45	16.03	14.67	14.92	15.19	15.42	16.01
12H	4H	9.27	9.63	9.76	10.12	10.60	9.24	9.61	9.73	10.10	10.58
	6H	12.01	12.12	12.35	12.59	13.14	11.98	12.09	12.33	12.56	13.11
	8H	13.34	13.59	13.86	14.09	14.67	13.31	13.57	13.84	14.07	14.65

Variation with the observer position at spacings:		
S = 1.0H	5.3/-8.7	5.3/-8.7
S = 1.5H	7.7/-6.6	7.7/-6.6
S = 2.0H	9.2/-5.0	9.2/-5.0
Standard tables:	BK2	BK2
Uncorrected UGR	0.9	0.9

Budgetary Estimate Table

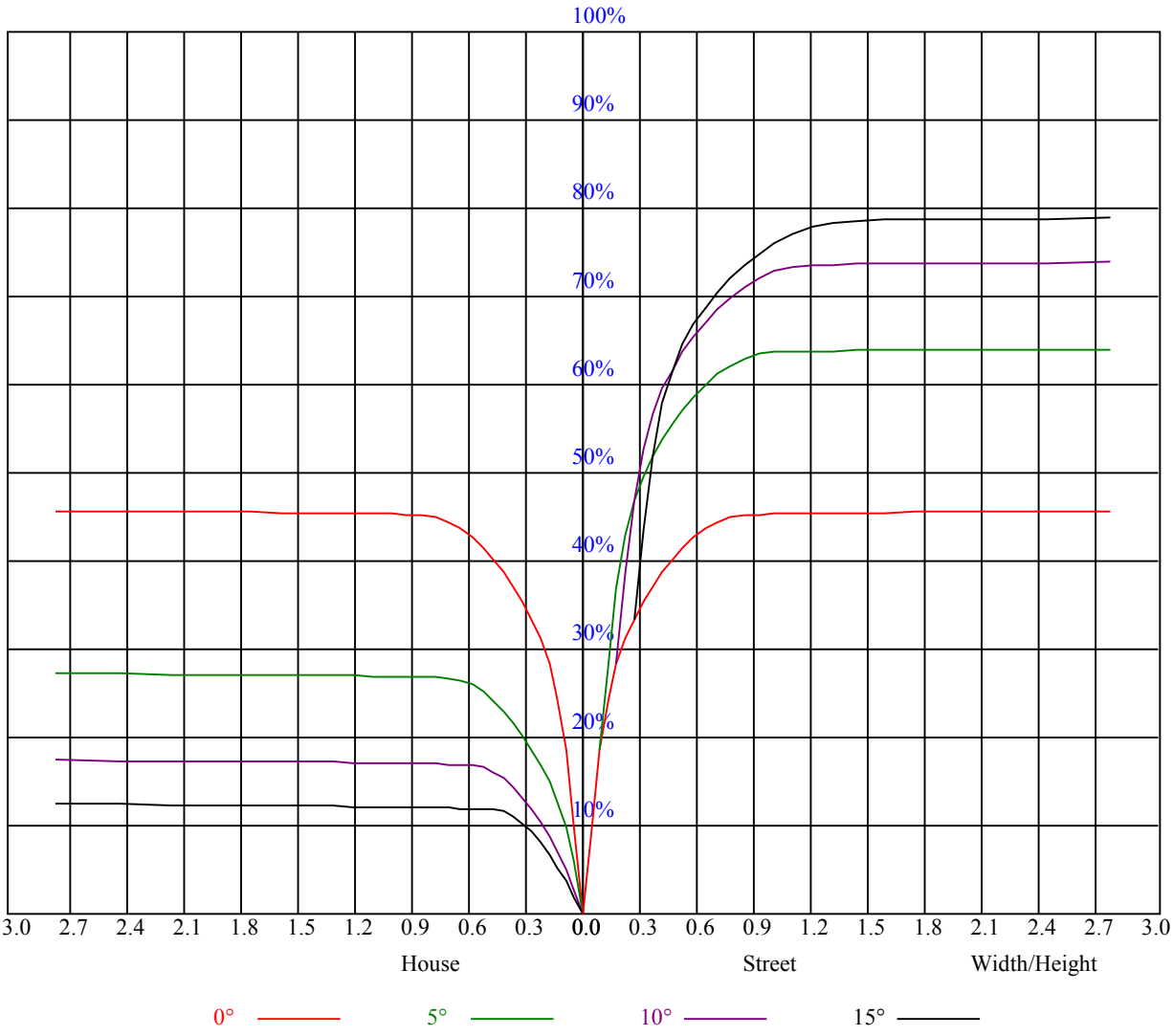


Equipment: GMS1980 Date: 2019/1/15 Operator: NT07
Temperature(°C): 10.0 Humidity(%): 65.0% Distance(m): 7.50

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	1.07	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	1.01	0.99	1.01	0.99	0.98	0.97	0.96	0.95	0.94	0.93	0.92	0.91	0.90	0.89	0.88
2	0.98	0.95	0.92	0.96	0.93	0.91	0.93	0.91	0.89	0.91	0.89	0.87	0.88	0.87	0.85	0.84
3	0.93	0.90	0.87	0.92	0.89	0.86	0.90	0.87	0.85	0.88	0.85	0.83	0.86	0.84	0.82	0.81
4	0.89	0.85	0.82	0.88	0.85	0.82	0.86	0.83	0.81	0.85	0.82	0.80	0.83	0.81	0.79	0.78
5	0.86	0.82	0.79	0.85	0.81	0.78	0.83	0.80	0.78	0.82	0.79	0.77	0.81	0.78	0.76	0.75
6	0.83	0.78	0.75	0.82	0.78	0.75	0.81	0.77	0.75	0.79	0.77	0.74	0.78	0.76	0.74	0.73
7	0.80	0.76	0.73	0.79	0.75	0.73	0.78	0.75	0.72	0.77	0.74	0.72	0.76	0.74	0.72	0.71
8	0.77	0.73	0.70	0.77	0.73	0.70	0.76	0.72	0.70	0.75	0.72	0.70	0.74	0.72	0.69	0.68
9	0.75	0.71	0.68	0.74	0.71	0.68	0.74	0.70	0.68	0.73	0.70	0.68	0.72	0.70	0.68	0.67
10	0.73	0.69	0.66	0.72	0.69	0.66	0.72	0.68	0.66	0.71	0.68	0.66	0.71	0.68	0.66	0.65

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	19119.38	18528.75	17010.00	15232.50	13151.25	10378.13	8229.38	6294.38	4550.63
45.0	18787.50	17628.75	16149.38	14276.25	12172.50	9450.00	7368.75	5563.13	3841.88
90.0	18675.00	18016.88	16661.25	14743.13	11050.31	10503.00	7841.25	5949.00	4413.38
135.0	18838.13	18990.00	18500.63	17285.63	15716.25	13528.13	11092.50	8898.75	7121.25
180.0	19119.38	19136.25	18371.25	17156.25	15463.13	13449.38	10949.06	8474.63	6455.81
225.0	18787.50	19051.88	18748.13	17741.25	16093.13	14180.63	11226.94	9351.00	7295.63
270.0	18675.00	18748.13	18106.88	16942.50	15046.88	13021.88	10642.50	8296.88	6390.00
315.0	18838.13	17960.63	16633.13	14625.00	11201.63	10113.75	7998.19	5930.44	4288.50
360.0	19119.38	18528.75	17010.00	15232.50	13151.25	10378.13	8229.38	6294.38	4550.63

C/γ(°)	9.0	10.0	11.0	12.0	13.0	14.0	15.0	16.0	17.0
0.0	3301.88	2896.88	2019.94	1666.13	1443.94	1257.19	1128.38	1018.69	941.06
45.0	2902.50	2520.56	1812.38	1504.13	1311.19	1153.69	1054.69	982.13	912.38
90.0	3175.31	2384.44	1933.31	1624.50	1356.75	1117.35	1076.57	981.51	912.77
135.0	4792.50	3560.63	2891.25	2099.25	1705.50	1463.63	1263.38	1117.69	1023.75
180.0	4600.69	3423.94	2545.31	1992.38	1670.06	1417.50	1121.96	1108.07	997.76
225.0	5316.19	3972.94	2913.19	2229.75	1836.00	1538.44	1328.06	1111.89	1073.03
270.0	5000.63	3414.38	2902.50	2144.25	1721.25	1491.19	1320.75	1177.88	1067.06
315.0	3249.56	2532.38	1949.63	1646.44	1429.31	1255.50	1110.54	1030.67	948.49
360.0	3301.88	2896.88	2019.94	1666.13	1443.94	1257.19	1128.38	1018.69	941.06

C/γ(°)	18.0	19.0	20.0	21.0	22.0	23.0	24.0	25.0	26.0
0.0	890.44	845.44	808.88	781.31	756.00	729.00	711.56	697.50	685.13
45.0	868.50	831.38	794.25	767.25	743.63	716.63	699.75	686.25	673.88
90.0	866.93	825.92	791.66	765.56	739.63	719.16	699.36	683.16	671.29
135.0	942.75	879.75	842.06	802.69	775.69	748.13	723.38	703.13	686.81
180.0	913.78	859.39	817.03	779.46	749.70	727.88	704.03	687.71	674.10
225.0	969.81	909.56	863.21	821.36	785.76	758.03	733.39	707.06	690.19
270.0	984.38	909.00	851.06	810.56	774.00	747.56	723.38	703.69	690.75
315.0	889.71	848.36	808.71	778.67	749.42	724.28	705.71	689.79	677.70
360.0	890.44	845.44	808.88	781.31	756.00	729.00	711.56	697.50	685.13

C/γ(°)	27.0	28.0	29.0	30.0	31.0	32.0	33.0	34.0	35.0
0.0	675.00	666.00	655.31	645.19	635.06	622.69	607.50	571.50	488.25
45.0	662.63	650.25	639.00	626.63	615.94	603.56	575.44	518.06	440.44
90.0	660.99	647.55	637.59	628.26	617.23	605.81	592.26	547.88	471.15
135.0	668.81	658.13	648.56	636.19	628.31	619.88	610.31	599.06	568.69
180.0	661.28	651.66	640.97	630.90	622.58	614.03	603.51	593.89	564.69
225.0	674.83	663.98	653.79	642.66	634.33	625.05	615.77	607.16	582.41
270.0	680.63	670.50	660.94	651.94	640.69	631.13	621.56	607.50	568.69
315.0	668.31	657.39	645.64	636.75	627.81	617.51	597.54	553.67	478.63
360.0	675.00	666.00	655.31	645.19	635.06	622.69	607.50	571.50	488.25

C/γ(°)	36.0	37.0	38.0	39.0	40.0	41.0	42.0	43.0	44.0
0.0	411.19	316.69	284.63	136.80	61.31	27.23	18.06	15.81	13.84
45.0	359.44	285.75	179.33	101.59	50.18	20.64	17.27	15.47	13.11
90.0	394.59	301.50	219.94	135.51	62.89	29.31	19.41	16.88	14.63
135.0	505.69	433.69	338.06	294.19	159.53	83.31	37.01	21.04	18.79
180.0	476.83	411.02	329.74	236.76	150.53	82.74	33.30	22.56	19.18
225.0	515.93	444.77	362.31	251.27	171.68	103.28	43.31	23.34	20.36
270.0	502.31	415.69	330.75	287.44	151.76	75.26	31.33	19.97	17.66
315.0	388.35	300.88	204.24	127.07	60.19	24.69	17.89	16.03	13.33
360.0	411.19	316.69	284.63	136.80	61.31	27.23	18.06	15.81	13.84

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	11.36	9.68	9.23	8.49	8.27	8.10	7.99	7.88	7.82
45.0	10.58	9.73	9.00	8.38	8.27	8.16	8.04	7.99	7.88
90.0	12.04	10.35	9.79	8.61	8.44	8.27	8.16	8.04	7.93
135.0	15.58	12.54	10.46	9.90	8.78	8.38	8.27	8.10	8.04
180.0	15.53	12.71	10.58	9.79	8.89	8.44	8.21	8.10	7.99
225.0	17.21	14.46	11.59	10.52	9.73	8.55	8.21	8.10	7.99
270.0	15.30	12.15	10.35	9.84	8.89	8.49	8.27	8.10	7.99
315.0	10.80	9.56	9.06	8.66	8.44	8.27	8.16	7.93	7.88
360.0	11.36	9.68	9.23	8.49	8.27	8.10	7.99	7.88	7.82

C/γ(°)	54.0	55.0	56.0	57.0	58.0	59.0	60.0	61.0	62.0
0.0	7.76	7.71	7.65	7.59	7.54	7.48	7.48	7.43	7.43
45.0	7.82	7.71	7.65	7.59	7.54	7.54	7.48	7.48	7.43
90.0	7.88	7.76	7.71	7.65	7.65	7.59	7.48	7.54	7.48
135.0	7.99	7.88	7.82	7.71	7.71	7.65	7.59	7.54	7.48
180.0	7.82	7.82	7.71	7.65	7.59	7.54	7.48	7.48	7.43
225.0	7.88	7.82	7.76	7.71	7.59	7.54	7.48	7.48	7.43
270.0	7.93	7.88	7.76	7.65	7.65	7.54	7.54	7.54	7.48
315.0	7.76	7.71	7.65	7.59	7.54	7.48	7.48	7.43	7.37
360.0	7.76	7.71	7.65	7.59	7.54	7.48	7.48	7.43	7.43

C/γ(°)	63.0	64.0	65.0	66.0	67.0	68.0	69.0	70.0	71.0
0.0	7.37	7.31	7.31	7.31	7.31	7.26	7.26	7.26	7.26
45.0	7.43	7.43	7.37	7.37	7.31	7.31	7.31	7.26	7.26
90.0	7.48	7.43	7.37	7.37	7.37	7.37	7.31	7.31	7.26
135.0	7.43	7.43	7.43	7.37	7.31	7.31	7.31	7.26	7.31
180.0	7.43	7.37	7.37	7.31	7.31	7.31	7.31	7.26	7.26
225.0	7.43	7.37	7.37	7.31	7.31	7.31	7.31	7.26	7.26
270.0	7.43	7.43	7.37	7.37	7.37	7.31	7.31	7.31	7.26
315.0	7.37	7.37	7.31	7.31	7.31	7.26	7.26	7.26	7.26
360.0	7.37	7.31	7.31	7.31	7.31	7.26	7.26	7.26	7.26

C/γ(°)	72.0	73.0	74.0	75.0	76.0	77.0	78.0	79.0	80.0
0.0	7.20	7.26	7.20	7.20	7.20	7.20	7.20	7.14	7.14
45.0	7.26	7.26	7.20	7.20	7.20	7.20	7.20	7.20	7.20
90.0	7.26	7.26	7.26	7.26	7.20	7.20	7.20	7.20	7.20
135.0	7.26	7.26	7.26	7.20	7.26	7.20	7.20	7.20	7.14
180.0	7.26	7.20	7.20	7.20	7.20	7.20	7.20	7.14	7.20
225.0	7.26	7.26	7.20	7.20	7.20	7.20	7.20	7.20	7.20
270.0	7.26	7.20	7.20	7.26	7.20	7.20	7.20	7.20	7.20
315.0	7.26	7.26	7.20	7.20	7.20	7.20	7.20	7.20	7.20
360.0	7.20	7.26	7.20	7.20	7.20	7.20	7.20	7.14	7.14

C/γ(°)	81.0	82.0	83.0	84.0	85.0	86.0	87.0	88.0	89.0
0.0	7.14	7.14	7.14	7.20	7.14	7.14	7.09	7.09	7.09
45.0	7.14	7.14	7.14	7.20	7.20	7.26	7.14	7.14	7.09
90.0	7.20	7.14	7.14	7.14	7.14	7.14	7.14	7.14	7.09
135.0	7.20	7.14	7.14	7.20	7.14	7.14	7.14	7.09	7.09
180.0	7.14	7.14	7.14	7.14	7.09	7.14	7.09	7.09	7.03
225.0	7.20	7.14	7.14	7.14	7.20	7.20	7.26	7.14	7.14
270.0	7.20	7.20	7.14	7.20	7.14	7.20	7.14	7.09	7.14
315.0	7.20	7.20	7.20	7.14	7.14	7.14	7.09	7.14	7.14
360.0	7.14	7.14	7.14	7.20	7.14	7.14	7.09	7.09	7.09

Intensity data(cd)

C/γ(°)	90.0
0.0	7.09
45.0	7.09
90.0	7.09
135.0	7.14
180.0	7.09
225.0	7.09
270.0	7.14
315.0	7.09
360.0	7.09