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NATA

LumCAT: 3-1935-E
Luminaire: 99.02.73.181

Report No: NATA0100	Voltage(V): 34.8700
Test No: GC2019022103	Current(A): 0.7000
LampCAT: LUMILEDS LUXEON 1208	Power (W): 24.4100
Lamp flux(lm): 2996.0	PF: 0.0000
Number of Lamps: 1	Ballast type: DC
Length(mm): 86	Width(mm): 86
Phm Type: C	Height(mm): 0

Photometric Results

Lumens(lm): 2654.23
Efficiency(%): 88.59%
Lumens(lm)/Power(W): 108.83
Central intensity(cd): 10195.730
Maximum intensity(cd): 10195.730
Angle of maximum intensity: C=0.0 γ=0.0
Beam Angle(50%Imax): [C0/180]Total=26.3
[C90/270]Total=26.3
Field angle(10%Imax): [C0/180]Total=55.5
[C90/270]Total=55.5
Maximum s/h(1/2): C0_180=0.45 C90_270=0.45
Maximum s/h(1/4): C0_180=0.42 C90_270=0.42
Up flux rate of lamp(%): 0.00%
Down flux rate of lamp(%): 88.67%
Up flux rate of LUM(%): - -
Down flux rate of LUM(%): 100.00%
CIE Type : Direct lighting
Output flux ratio in π solid angle : 98.651%

Equipment: GMS1980	Date: 2019/2/21	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	10195.734	2.439	2.439	.081%	.092%
1.0	10172.039	19.468	21.907	.650%	.825%
2.0	10090.688	38.618	60.525	1.289%	2.280%
3.0	9921.023	56.939	117.464	1.900%	4.426%
4.0	9677.109	74.026	191.49	2.471%	7.215%
5.0	9353.391	89.396	280.885	2.984%	10.583%
6.0	8955.141	102.650	383.535	3.426%	14.450%
7.0	8511.820	113.755	497.29	3.797%	18.736%
8.0	8097.047	123.576	620.866	4.125%	23.392%
9.0	7590.727	130.217	751.083	4.346%	28.298%
10.0	7051.500	134.278	885.36	4.482%	33.357%
11.0	6517.617	136.376	1021.737	4.552%	38.495%
12.0	5901.188	134.546	1156.282	4.491%	43.564%
13.0	5188.992	128.004	1284.286	4.272%	48.386%
14.0	4509.563	119.636	1403.922	3.993%	52.894%
15.0	3806.227	108.030	1511.952	3.606%	56.964%
16.0	3115.688	94.177	1606.128	3.143%	60.512%
17.0	2542.641	81.521	1687.65	2.721%	63.584%
18.0	2081.531	70.537	1758.187	2.354%	66.241%
19.0	1771.172	63.235	1821.421	2.111%	68.623%
20.0	1546.313	57.996	1879.418	1.936%	70.809%
21.0	1381.148	54.278	1933.695	1.812%	72.853%
22.0	1276.024	52.419	1986.114	1.750%	74.828%
23.0	1202.541	51.526	2037.64	1.720%	76.770%
24.0	1139.878	50.842	2088.482	1.697%	78.685%
25.0	1090.631	50.545	2139.027	1.687%	80.590%
26.0	1066.282	51.258	2190.286	1.711%	82.521%
27.0	1038.558	51.705	2241.991	1.726%	84.469%
28.0	1013.091	52.157	2294.147	1.741%	86.434%
29.0	982.603	52.240	2346.387	1.744%	88.402%
30.0	922.078	50.558	2396.945	1.688%	90.307%
31.0	815.716	46.071	2443.016	1.538%	92.043%
32.0	693.570	40.304	2483.32	1.345%	93.561%
33.0	577.413	34.486	2517.807	1.151%	94.860%
34.0	446.063	27.353	2545.16	.913%	95.891%
35.0	329.653	20.735	2565.895	.692%	96.672%
36.0	215.346	13.881	2579.775	.463%	97.195%
37.0	131.836	8.701	2588.476	.290%	97.523%

Zonal flux distribution table

γ(°)	Average I(cd)	Zonal F(lm)	Sum F(lm)	Eff Flux(%)	Eff Sum(%)
38.0	61.678	4.164	2592.64	.139%	97.680%
39.0	42.068	2.903	2595.543	.097%	97.789%
40.0	31.620	2.229	2597.772	.074%	97.873%
41.0	22.507	1.619	2599.391	.054%	97.934%
42.0	18.148	1.332	2600.723	.044%	97.984%
43.0	16.988	1.270	2601.993	.042%	98.032%
44.0	16.144	1.230	2603.223	.041%	98.078%
45.0	15.342	1.190	2604.413	.040%	98.123%
46.0	14.695	1.159	2605.572	.039%	98.167%
47.0	14.077	1.129	2606.701	.038%	98.209%
48.0	13.627	1.110	2607.812	.037%	98.251%
49.0	13.233	1.095	2608.907	.037%	98.293%
50.0	12.902	1.084	2609.991	.036%	98.333%
51.0	12.635	1.077	2611.067	.036%	98.374%
52.0	12.389	1.071	2612.138	.036%	98.414%
53.0	12.192	1.068	2613.206	.036%	98.455%
54.0	12.023	1.067	2614.272	.036%	98.495%
55.0	11.890	1.068	2615.341	.036%	98.535%
56.0	11.756	1.069	2616.409	.036%	98.575%
57.0	11.665	1.073	2617.482	.036%	98.616%
58.0	11.573	1.076	2618.558	.036%	98.656%
59.0	11.510	1.082	2619.64	.036%	98.697%
60.0	11.426	1.085	2620.725	.036%	98.738%
61.0	11.363	1.090	2621.815	.036%	98.779%
62.0	11.292	1.093	2622.909	.036%	98.820%
63.0	11.257	1.100	2624.009	.037%	98.862%
64.0	11.208	1.105	2625.113	.037%	98.903%
65.0	11.180	1.111	2626.224	.037%	98.945%
66.0	11.180	1.120	2627.344	.037%	98.987%
67.0	11.130	1.124	2628.468	.038%	99.030%
68.0	11.095	1.128	2629.596	.038%	99.072%
69.0	11.053	1.132	2630.728	.038%	99.115%
70.0	11.032	1.137	2631.864	.038%	99.158%
71.0	11.004	1.141	2633.005	.038%	99.201%
72.0	10.955	1.143	2634.148	.038%	99.244%
73.0	10.934	1.147	2635.294	.038%	99.287%
74.0	10.905	1.150	2636.444	.038%	99.330%
75.0	10.870	1.151	2637.595	.038%	99.373%

Zonal flux distribution table

γ(°)	Average I(cd)	Zonal F(lm)	Sum F(lm)	Eff Flux(%)	Eff Sum(%)
76.0	10.835	1.153	2638.748	.038%	99.417%
77.0	10.800	1.154	2639.902	.039%	99.460%
78.0	10.758	1.154	2641.056	.039%	99.504%
79.0	10.737	1.156	2642.212	.039%	99.547%
80.0	10.695	1.155	2643.367	.039%	99.591%
81.0	10.645	1.153	2644.52	.038%	99.634%
82.0	10.596	1.151	2645.671	.038%	99.678%
83.0	10.575	1.151	2646.822	.038%	99.721%
84.0	10.519	1.147	2647.969	.038%	99.764%
85.0	10.484	1.145	2649.114	.038%	99.807%
86.0	10.448	1.143	2650.257	.038%	99.850%
87.0	10.406	1.140	2651.397	.038%	99.893%
88.0	10.357	1.135	2652.532	.038%	99.936%
89.0	10.315	1.131	2653.663	.038%	99.979%
90.0	10.259	0.562	2654.225	.019%	100.000%

Zonal flux distribution table

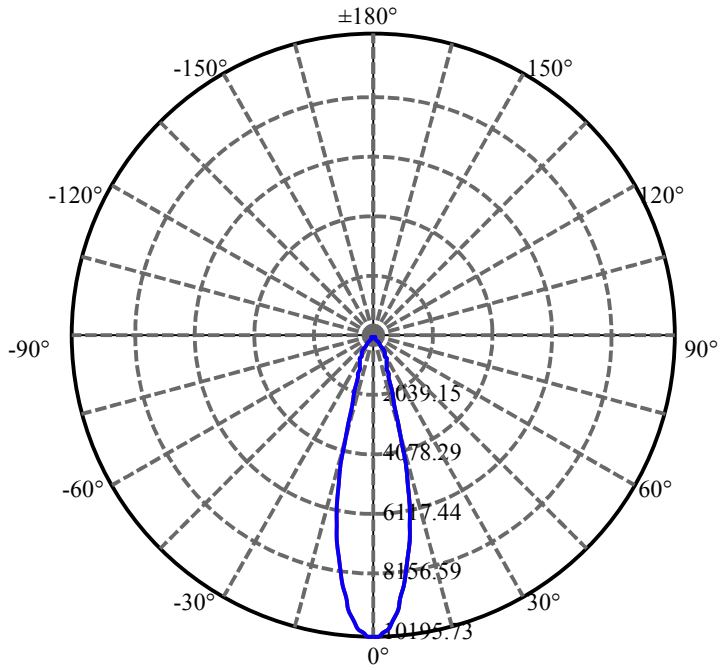
ZONAL LUMEN SUMMARY

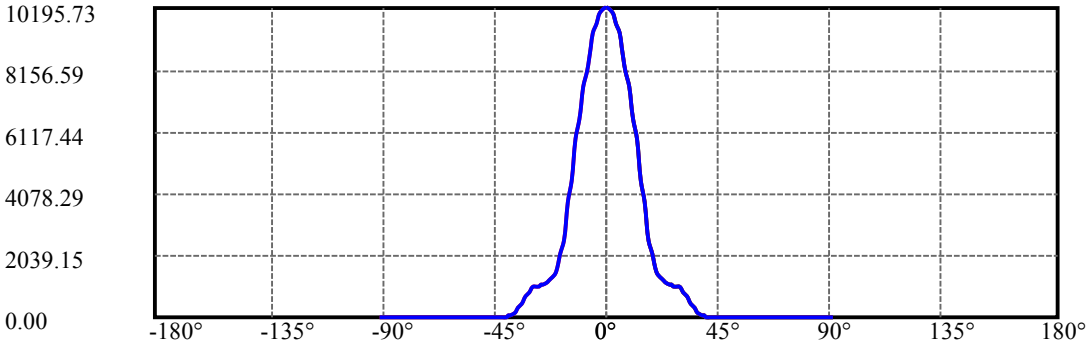
Zone	Lumens	%Lamp	%Fixt
0-30	2396.94	80.00%	90.31%
0-40	2597.77	86.71%	97.87%
0-60	2620.73	87.47%	98.74%
0-90	2653.66	88.57%	99.98%
0-120	2653.66	88.57%	99.98%
0-180	2654.23	88.59%	100.00%
60-90	34.02	1.14%	1.28%
90-120	0.00	0.00%	0.00%
90-130	0.00	0.00%	0.00%
90-150	0.00	0.00%	0.00%
90-180	0.00	0.00%	0.00%
0-24.69	2123.38	70.87%	80.00%

ZONAL LUMEN SUMMARY

0-10	885.36
10-20	994.06
20-30	517.53
30-40	200.83
40-50	12.22
50-60	10.73
60-70	11.14
70-80	11.50
80-90	10.30
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:27.7 Right:27.7
:C90/270Left:27.7 Right:27.7

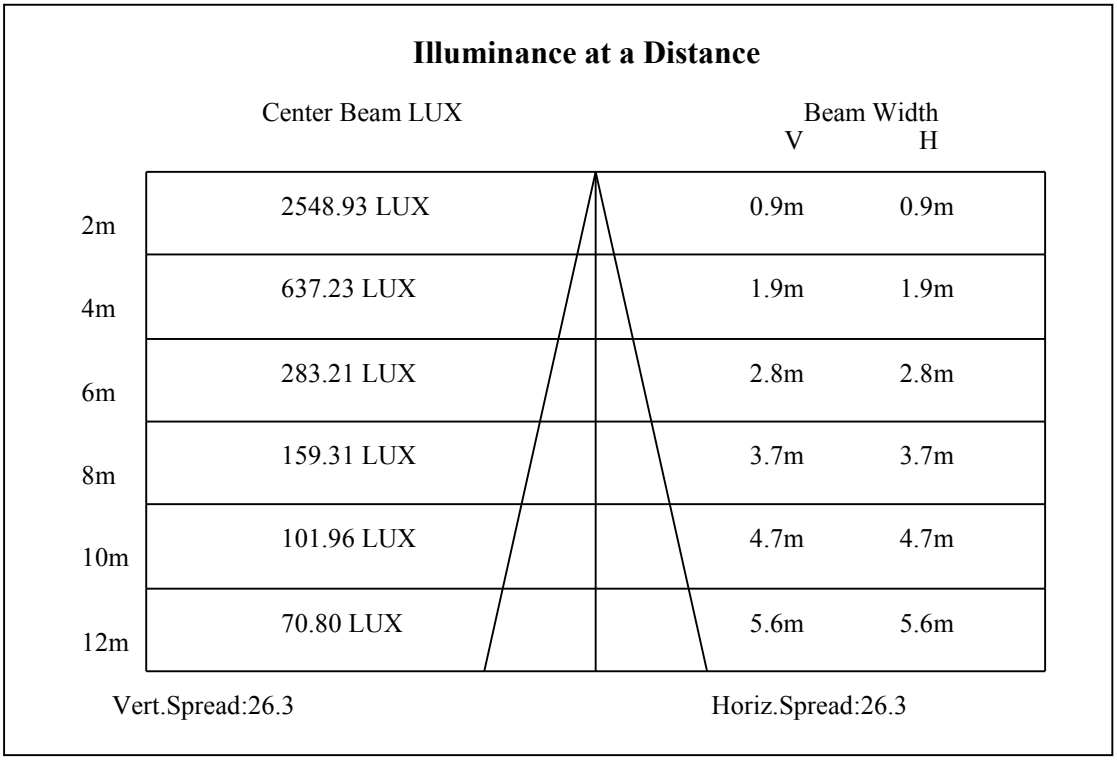
Beam Angle(50%Imax):C0/180Left:13.1 Right:13.1
:C90/270Left:13.1 Right:13.1

Equipment: GMS1980
Temperature(°C): 10.0

Date: 2019/2/21
Humidity(%): 65.0%

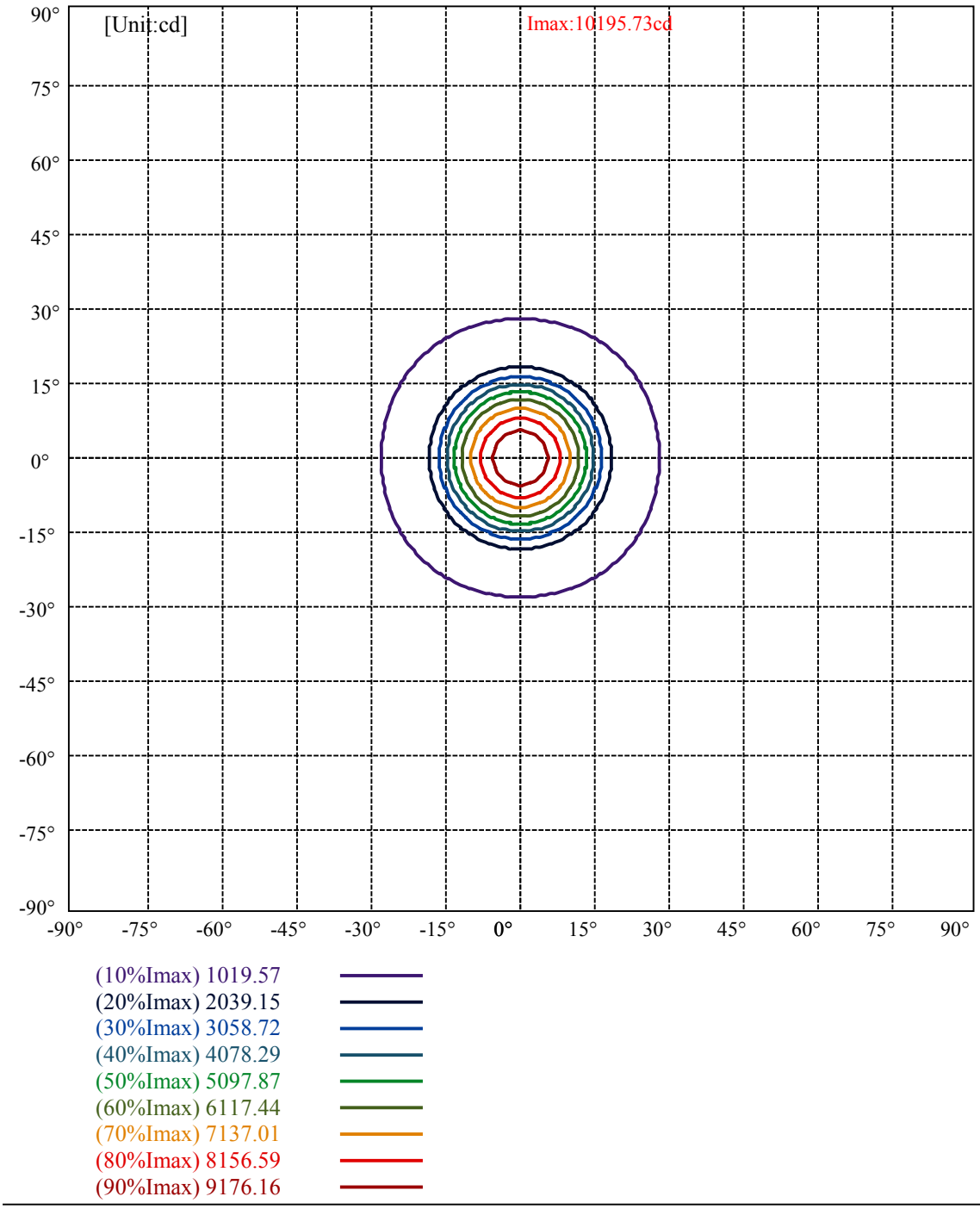
Operator: NT07
Distance(m): 7.50

Lux distance Curve



Equipment: GMS1980 Date: 2019/2/21 Operator: NT07
Temperature(°C): 10.0 Humidity(%): 65.0% Distance(m): 7.50

ISO-Intensity(V-H)

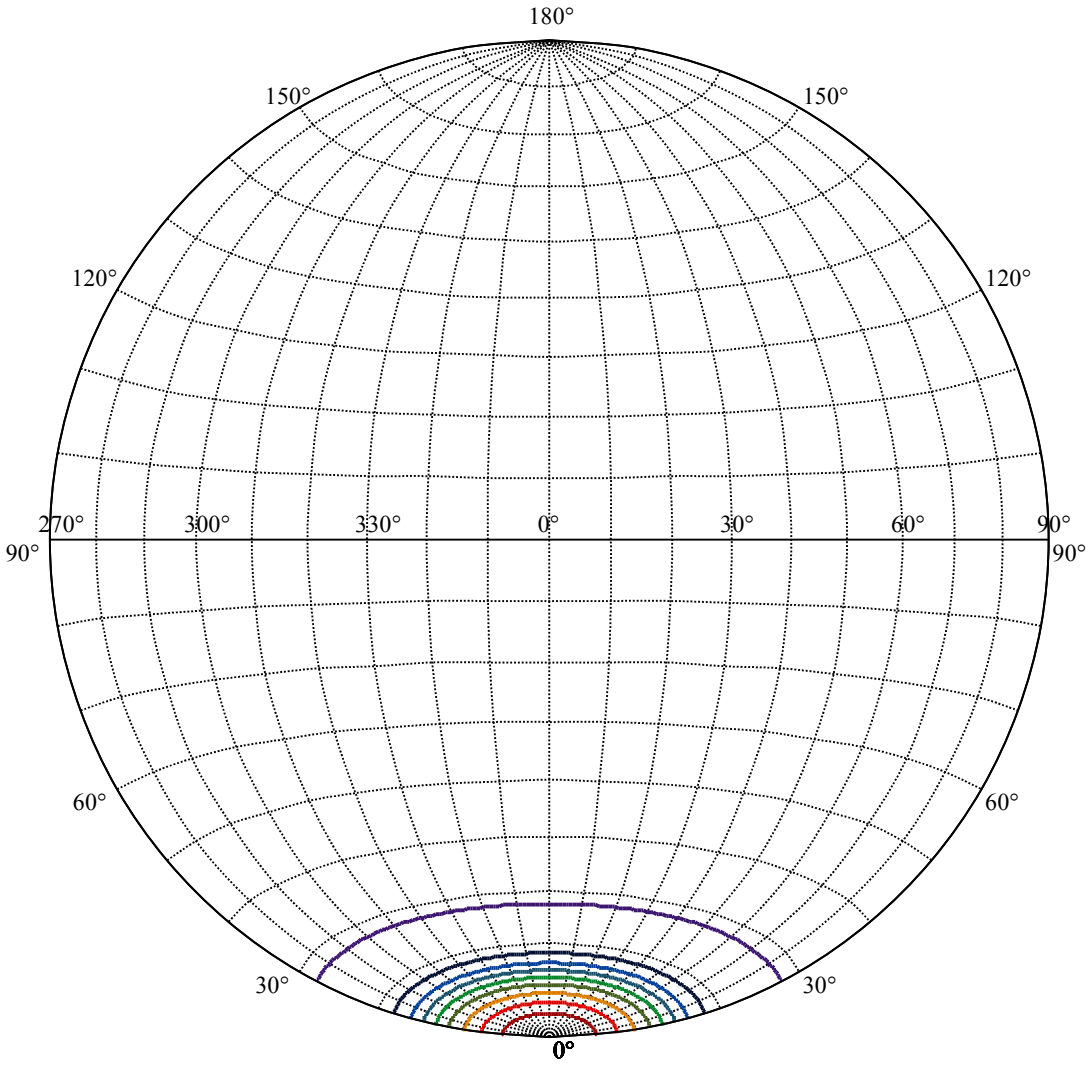


Equipment: GMS1980
Temperature(°C): 10.0

Date: 2019/2/21
Humidity(%): 65.0%

Operator: NT07
Distance(m): 7.50

ISO candela diagram on circular web



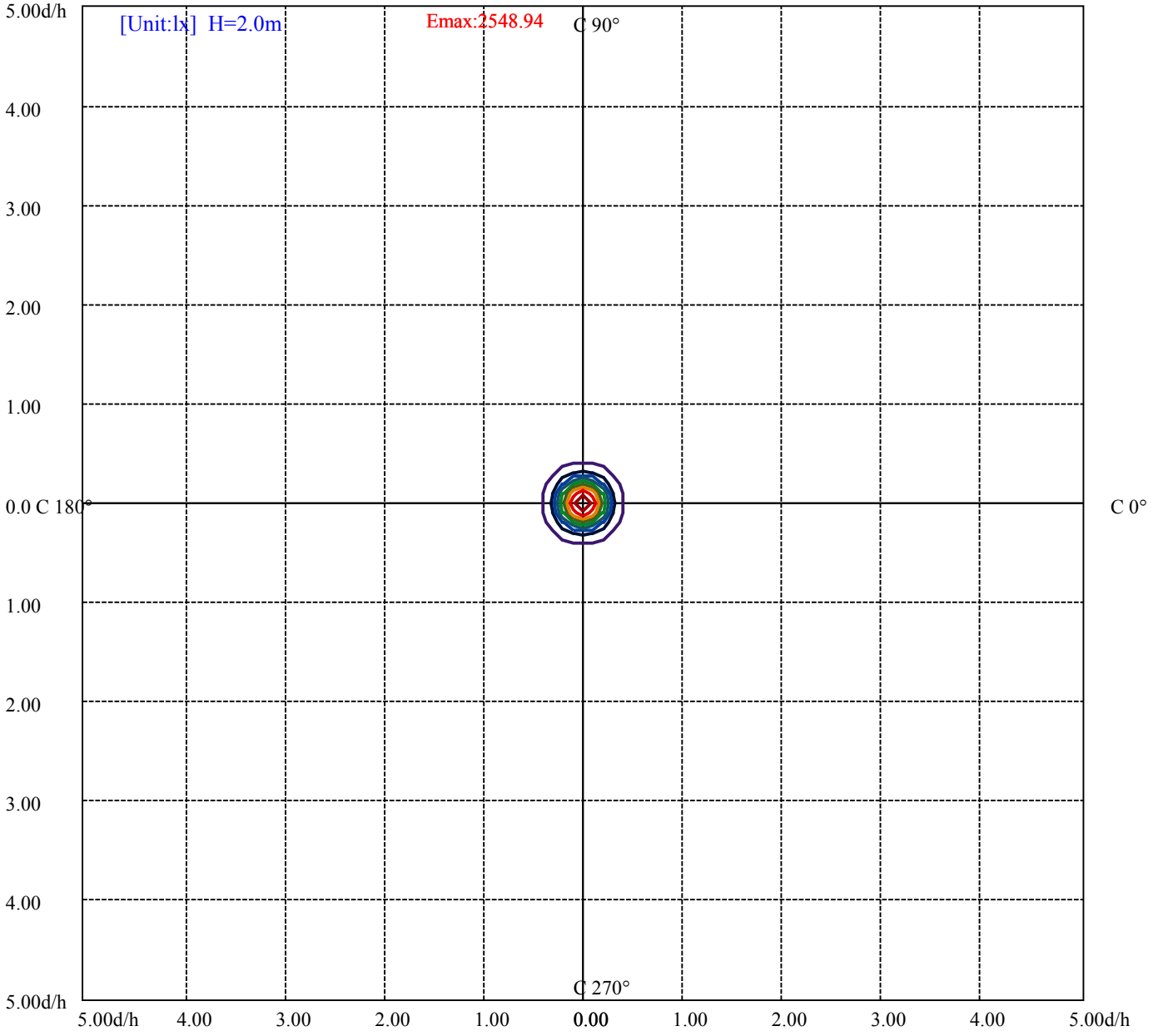
House [Unit:cd] Road

Imax:10195.73

(10%Imax) 1019.57
(20%Imax) 2039.15
(30%Imax) 3058.72
(40%Imax) 4078.29
(50%Imax) 5097.87
(60%Imax) 6117.44
(70%Imax) 7137.01
(80%Imax) 8156.59
(90%Imax) 9176.16

Equipment: GMS1980 Date: 2019/2/21 Operator: NT07
Temperature(°C): 10.0 Humidity(%): 65.0% Distance(m): 7.50

ISO illuminance diagram

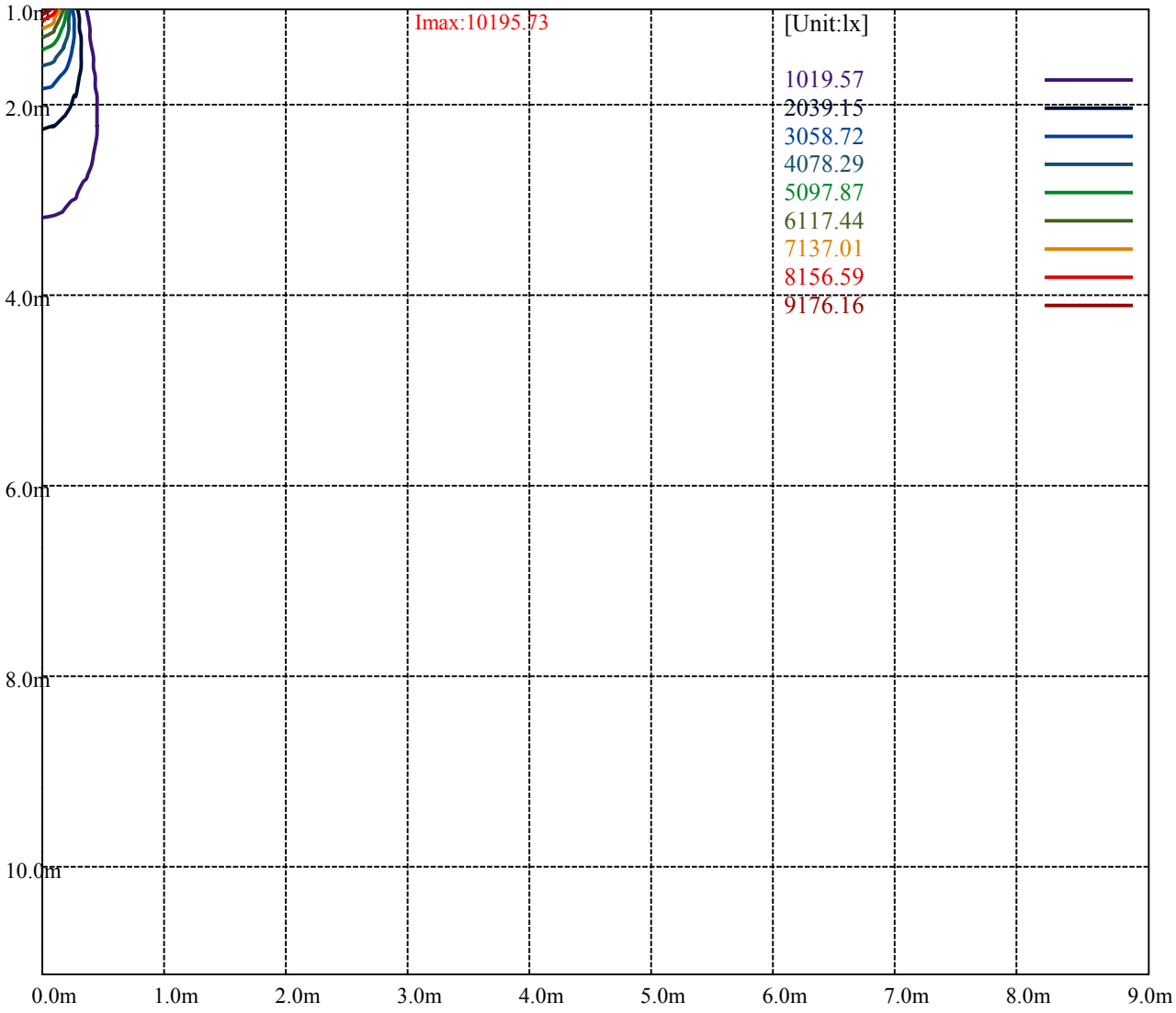


Equipment: GMS1980
Temperature(°C): 10.0

Date: 2019/2/21
Humidity(%): 65.0%

Operator: NT07
Distance(m): 7.50

Space ISO Lux diagram



Equipment: GMS1980
Temperature(°C): 10.0

Date: 2019/2/21
Humidity(%): 65.0%

Operator: NT07
Distance(m): 7.50

Luminance Limitting Curve(no luminous side)

Luminance Table

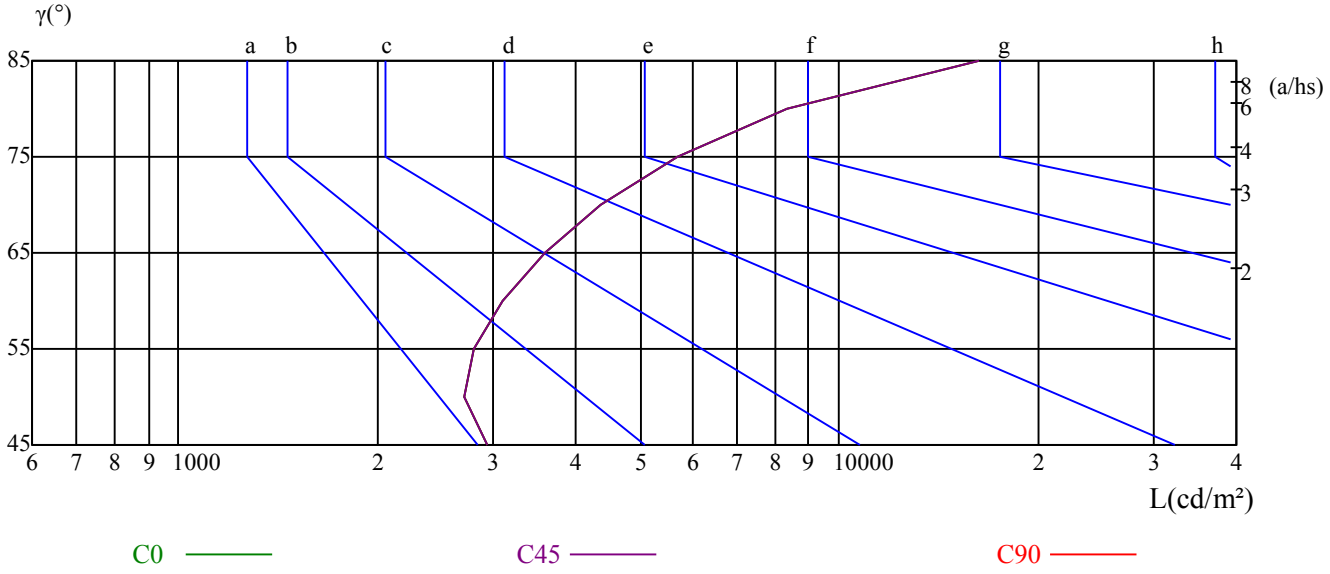
γ	45	50	55	60	65	70	75	80	85
C0	2934	2714	2803	3090	3577	4361	5679	8327	16264
C45	2934	2714	2803	3090	3577	4361	5679	8327	16264
C90	2934	2714	2803	3090	3577	4361	5679	8327	16264

L(Hor)(65)	L(Ver)(65)	L45(65)	L(Hor)(75)	L(Ver)(75)	L45(75)	L(Hor)(85)	L(Ver)(85)	L45(85)
3577	3577	3577	5679	5679	5679	16264	16264	16264

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

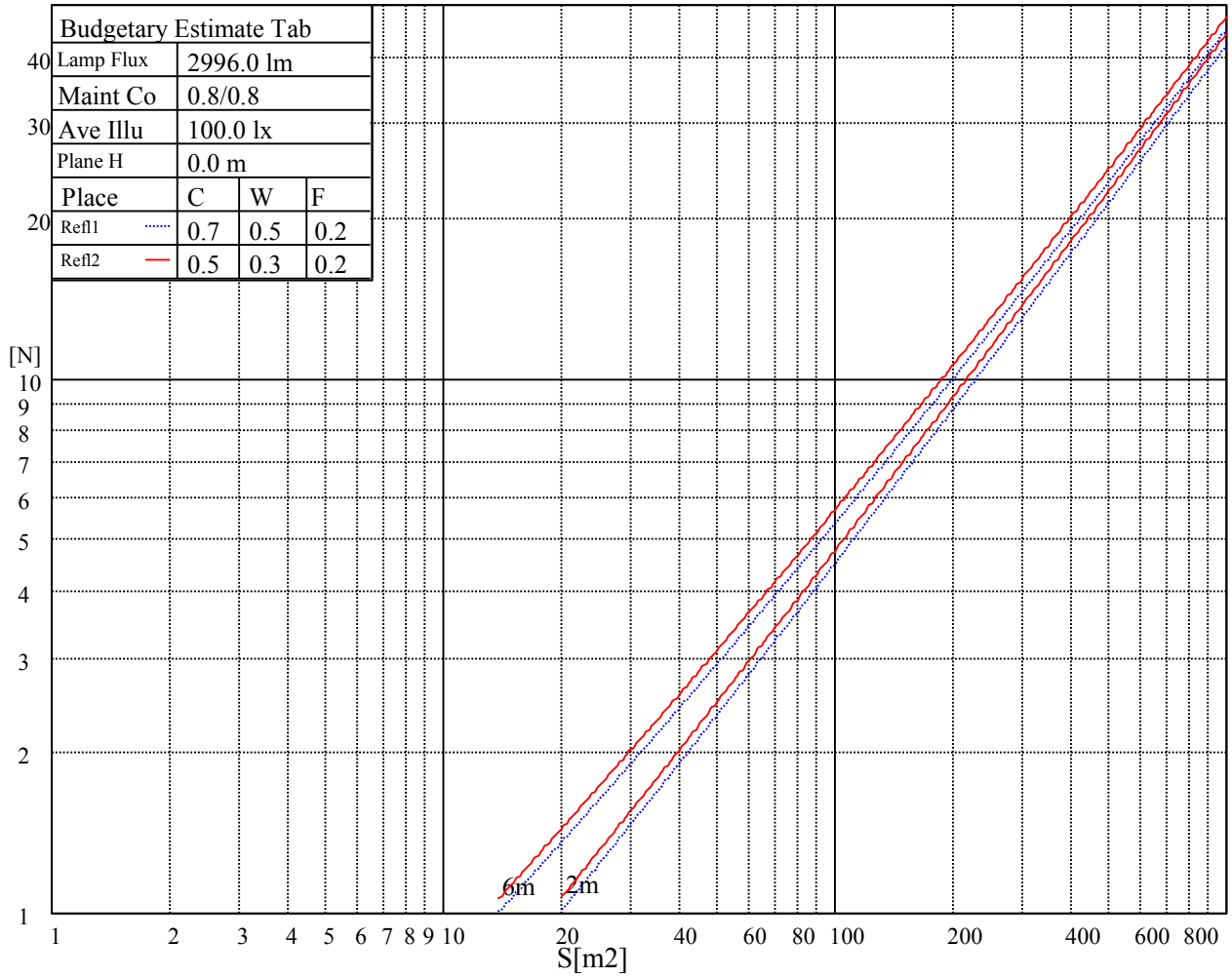
Luminance Limitting Curve



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	1.06	1.97	1.42	2.28	2.59	0.70	1.61	1.07	1.92	2.24
	3H	4.29	5.09	4.67	5.42	5.79	4.06	4.86	4.45	5.20	5.57
	4H	6.03	6.78	6.44	7.13	7.52	5.87	6.61	6.28	6.97	7.36
	6H	8.00	8.68	8.42	9.06	9.46	7.87	8.55	8.29	8.92	9.32
	8H	9.07	9.71	9.51	10.10	10.51	8.96	9.60	9.40	9.99	10.40
	12H	10.78	11.39	11.22	11.78	12.21	10.73	11.33	11.16	11.72	12.15
4H	2H	1.92	2.66	2.33	3.01	3.40	1.67	2.41	2.08	2.76	3.15
	3H	5.40	6.01	5.82	6.42	6.83	5.25	5.86	5.67	6.27	6.67
	4H	7.32	7.86	7.76	8.29	8.74	7.20	7.75	7.64	8.17	8.62
	6H	9.43	9.89	9.90	10.34	10.82	9.33	9.79	9.80	10.25	10.72
	8H	10.60	11.03	11.08	11.49	11.96	10.53	10.96	11.00	11.41	11.89
	12H	12.22	12.59	12.71	13.08	13.56	12.19	12.56	12.68	13.05	13.53
8H	4H	8.02	8.46	8.50	8.91	9.39	7.93	8.36	8.41	8.82	9.29
	6H	10.40	10.74	10.92	11.25	11.74	10.33	10.67	10.84	11.17	11.66
	8H	11.77	12.07	12.30	12.59	13.09	11.71	12.01	12.25	12.54	13.03
	12H	13.52	13.78	14.05	14.28	14.86	13.51	13.76	14.03	14.26	14.85
12H	4H	8.22	8.59	8.72	9.08	9.56	8.14	8.51	8.63	9.00	9.48
	6H	10.91	11.01	11.25	11.49	12.04	10.84	10.95	11.18	11.42	11.97
	8H	12.20	12.46	12.73	12.96	13.54	12.16	12.41	12.68	12.91	13.49
Variation with the observer position at spacings:											
S = 1.0H		6.0/-6.0					6.0/-6.0				
S = 1.5H		7.7/-4.1					7.7/-4.1				
S = 2.0H		8.8/-2.9					8.8/-2.9				
Standard tables:		BK4					BK4				
Uncorrected UGR		-0.7					-0.7				

Budgetary Estimate Table

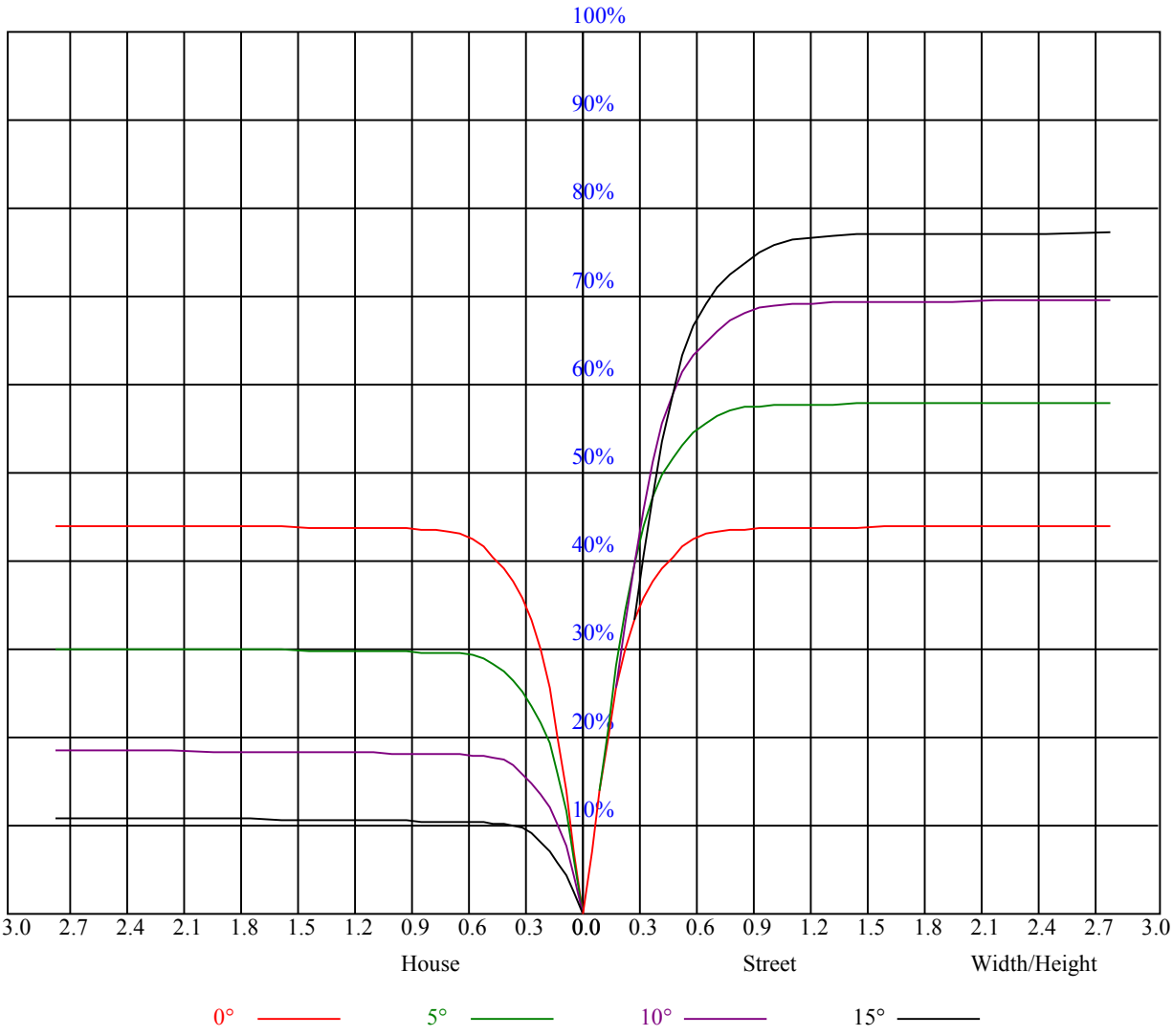


Equipment: GMS1980 Date: 2019/2/21 Operator: NT07
Temperature(°C): 10.0 Humidity(%): 65.0% Distance(m): 7.50

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	1.06	1.06	1.06	1.03	1.03	1.03	0.99	0.99	0.99	0.94	0.94	0.94	0.90	0.90	0.90	0.89
1	0.99	0.98	0.96	0.98	0.96	0.94	0.94	0.93	0.91	0.91	0.90	0.89	0.88	0.87	0.86	0.85
2	0.94	0.91	0.89	0.93	0.90	0.88	0.90	0.88	0.86	0.87	0.86	0.84	0.85	0.84	0.83	0.81
3	0.90	0.86	0.84	0.89	0.86	0.83	0.87	0.84	0.82	0.84	0.82	0.80	0.83	0.81	0.79	0.78
4	0.86	0.82	0.79	0.85	0.82	0.79	0.83	0.80	0.78	0.82	0.79	0.77	0.80	0.78	0.76	0.75
5	0.83	0.79	0.76	0.82	0.78	0.75	0.80	0.77	0.75	0.79	0.76	0.74	0.78	0.75	0.74	0.72
6	0.79	0.75	0.73	0.79	0.75	0.72	0.78	0.74	0.72	0.76	0.74	0.71	0.75	0.73	0.71	0.70
7	0.77	0.73	0.70	0.76	0.72	0.70	0.75	0.72	0.69	0.74	0.71	0.69	0.73	0.71	0.69	0.68
8	0.74	0.70	0.67	0.74	0.70	0.67	0.73	0.69	0.67	0.72	0.69	0.67	0.71	0.68	0.66	0.65
9	0.72	0.68	0.65	0.71	0.67	0.65	0.70	0.67	0.65	0.70	0.67	0.65	0.69	0.66	0.64	0.63
10	0.69	0.66	0.63	0.69	0.65	0.63	0.68	0.65	0.63	0.68	0.65	0.63	0.67	0.65	0.62	0.62

Coefficient Utilization Curve



Equipment: GMS1980	Date: 2019/2/21	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	10166.63	10207.69	10184.63	10098.56	9866.25	9538.88	9216.56	8721.00	8312.06
45.0	10220.06	10179.00	10062.00	9888.19	9605.25	9266.06	8832.94	8370.56	7943.63
90.0	10174.50	10062.56	9905.63	9591.75	9260.44	8870.06	8437.50	7959.38	7539.75
135.0	10221.75	10126.13	9967.50	9781.31	9477.56	9093.38	8714.81	8286.75	7887.94
180.0	10166.63	10100.25	9982.13	9722.25	9479.81	9155.25	8746.31	8304.19	7895.81
225.0	10220.06	10202.63	10146.94	9997.88	9794.25	9507.94	9082.69	8692.31	8283.38
270.0	10174.50	10242.00	10242.56	10182.38	10026.56	9772.31	9455.06	9017.44	8601.19
315.0	10221.75	10256.06	10234.13	10105.88	9906.75	9623.25	9155.25	8742.94	8312.63
360.0	10166.63	10207.69	10184.63	10098.56	9866.25	9538.88	9216.56	8721.00	8312.06

C/γ(°)	9.0	10.0	11.0	12.0	13.0	14.0	15.0	16.0	17.0
0.0	7815.94	7272.56	6748.88	6175.69	5395.50	4746.38	4083.19	3265.88	2688.19
45.0	7432.31	6873.75	6318.56	5726.81	4929.75	4274.44	3627.00	2921.63	2368.13
90.0	7005.38	6431.06	5870.25	5193.00	4551.19	3816.00	3115.69	2559.38	2099.25
135.0	7416.00	6883.31	6361.31	5791.50	5022.56	4376.81	3727.69	2967.19	2454.75
180.0	7400.81	6853.50	6322.50	5744.25	5037.75	4303.69	3575.81	2967.75	2444.06
225.0	7808.06	7276.50	6748.88	6108.19	5407.88	4762.13	4016.25	3362.06	2703.38
270.0	8118.56	7596.56	7097.63	6540.19	5789.25	5146.88	4480.88	3632.06	2986.88
315.0	7728.75	7224.75	6672.94	5929.88	5378.06	4650.19	3823.31	3249.56	2596.50
360.0	7815.94	7272.56	6748.88	6175.69	5395.50	4746.38	4083.19	3265.88	2688.19

C/γ(°)	18.0	19.0	20.0	21.0	22.0	23.0	24.0	25.0	26.0
0.0	2228.63	1868.06	1623.38	1468.69	1342.13	1260.00	1193.63	1146.94	1114.88
45.0	1987.88	1696.50	1497.94	1370.81	1263.38	1198.13	1146.38	1109.25	1084.50
90.0	1704.38	1492.88	1336.50	1178.44	1121.57	1069.20	1027.18	997.31	975.49
135.0	2043.56	1724.63	1508.06	1367.44	1254.38	1187.44	1133.44	1097.44	1073.81
180.0	1995.19	1689.75	1504.13	1342.13	1253.81	1190.25	1121.34	1098.45	1074.49
225.0	2189.25	1868.63	1644.19	1450.69	1340.44	1258.88	1189.69	1120.84	1113.81
270.0	2435.63	2011.50	1642.50	1451.81	1302.19	1202.06	1109.25	1032.75	981.56
315.0	2067.75	1817.44	1613.81	1419.19	1330.31	1254.38	1198.13	1122.08	1111.73
360.0	2228.63	1868.06	1623.38	1468.69	1342.13	1260.00	1193.63	1146.94	1114.88

C/γ(°)	27.0	28.0	29.0	30.0	31.0	32.0	33.0	34.0	35.0
0.0	1085.06	1053.00	1031.06	990.56	884.25	775.13	655.88	504.56	383.06
45.0	1056.38	1026.56	992.81	915.19	802.69	655.88	543.94	423.56	289.69
90.0	947.98	926.27	862.48	772.37	653.79	527.63	417.71	299.93	204.75
135.0	1045.69	1020.94	988.88	911.25	781.88	660.38	536.63	390.38	295.88
180.0	1049.51	1022.40	986.29	908.89	791.16	657.45	535.44	399.43	284.34
225.0	1087.48	1055.42	1031.91	981.62	892.74	768.26	632.03	506.70	367.48
270.0	951.19	950.06	941.06	911.25	830.25	737.44	649.13	533.81	426.38
315.0	1085.18	1050.08	1026.34	985.50	888.98	766.41	648.56	510.13	385.65
360.0	1085.06	1053.00	1031.06	990.56	884.25	775.13	655.88	504.56	383.06

C/γ(°)	36.0	37.0	38.0	39.0	40.0	41.0	42.0	43.0	44.0
0.0	295.31	149.06	66.26	41.06	31.39	21.77	15.36	14.46	13.95
45.0	172.35	89.49	44.16	35.21	26.10	17.61	15.64	15.19	14.79
90.0	114.30	58.78	47.03	37.63	28.01	23.57	21.83	19.86	17.66
135.0	167.23	91.86	43.93	36.56	27.17	18.56	15.58	15.02	14.68
180.0	168.13	80.44	43.93	34.99	24.19	16.99	14.51	13.89	13.44
225.0	238.67	142.14	70.03	40.84	31.89	22.44	16.99	15.64	15.19
270.0	310.50	296.44	105.02	67.44	51.92	36.79	28.29	25.99	24.02
315.0	256.28	146.48	73.07	42.81	32.29	22.33	16.99	15.86	15.41
360.0	295.31	149.06	66.26	41.06	31.39	21.77	15.36	14.46	13.95

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	13.56	13.22	12.99	12.71	12.49	12.26	12.15	11.98	11.81
45.0	14.51	14.12	13.67	13.22	12.88	12.54	12.32	12.15	11.98
90.0	15.92	14.91	14.34	13.89	13.50	13.22	12.94	12.60	12.43
135.0	14.34	14.06	13.50	13.11	12.71	12.43	12.21	12.04	11.81
180.0	13.16	12.88	12.66	12.49	12.26	12.09	11.98	11.81	11.70
225.0	14.79	14.40	13.95	13.44	12.99	12.66	12.32	12.09	11.93
270.0	21.38	19.35	17.38	16.48	15.86	15.19	14.63	14.18	13.78
315.0	15.08	14.63	14.12	13.67	13.16	12.83	12.54	12.26	12.09
360.0	13.56	13.22	12.99	12.71	12.49	12.26	12.15	11.98	11.81

C/γ(°)	54.0	55.0	56.0	57.0	58.0	59.0	60.0	61.0	62.0
0.0	11.70	11.59	11.48	11.42	11.36	11.25	11.14	11.14	11.08
45.0	11.81	11.76	11.64	11.53	11.42	11.42	11.36	11.31	11.25
90.0	12.26	12.09	11.98	11.93	11.81	11.76	11.64	11.59	11.48
135.0	11.70	11.59	11.53	11.42	11.36	11.31	11.25	11.19	11.14
180.0	11.59	11.48	11.36	11.31	11.19	11.19	11.08	11.03	10.97
225.0	11.76	11.64	11.53	11.42	11.36	11.31	11.31	11.19	11.14
270.0	13.44	13.22	12.88	12.71	12.54	12.43	12.26	12.15	12.04
315.0	11.93	11.76	11.64	11.59	11.53	11.42	11.36	11.31	11.25
360.0	11.70	11.59	11.48	11.42	11.36	11.25	11.14	11.14	11.08

C/γ(°)	63.0	64.0	65.0	66.0	67.0	68.0	69.0	70.0	71.0
0.0	11.03	10.97	10.97	11.19	11.14	11.14	11.14	11.14	11.19
45.0	11.19	11.14	11.08	11.08	11.03	11.03	10.97	10.97	10.91
90.0	11.42	11.36	11.36	11.31	11.25	11.25	11.19	11.14	11.14
135.0	11.14	11.08	11.08	11.03	11.03	10.91	10.91	10.91	10.86
180.0	10.91	10.91	10.91	10.86	10.86	10.86	10.86	10.91	10.86
225.0	11.14	11.14	11.08	11.08	11.03	10.97	10.91	10.86	10.86
270.0	11.98	11.87	11.76	11.70	11.59	11.53	11.42	11.36	11.31
315.0	11.25	11.19	11.19	11.19	11.14	11.08	11.03	10.97	10.91
360.0	11.03	10.97	10.97	11.19	11.14	11.14	11.14	11.14	11.19

C/γ(°)	72.0	73.0	74.0	75.0	76.0	77.0	78.0	79.0	80.0
0.0	11.14	11.14	11.08	11.08	11.03	10.97	10.97	10.91	10.86
45.0	10.86	10.86	10.86	10.80	10.80	10.80	10.74	10.74	10.69
90.0	11.08	11.08	11.08	11.03	11.03	11.03	11.03	10.97	10.97
135.0	10.80	10.80	10.80	10.74	10.74	10.69	10.63	10.63	10.58
180.0	10.86	10.80	10.80	10.74	10.69	10.63	10.58	10.58	10.52
225.0	10.80	10.74	10.69	10.69	10.69	10.63	10.58	10.58	10.52
270.0	11.25	11.19	11.14	11.08	11.03	10.97	10.91	10.86	10.86
315.0	10.86	10.86	10.80	10.80	10.69	10.69	10.63	10.63	10.58
360.0	11.14	11.14	11.08	11.08	11.03	10.97	10.97	10.91	10.86

C/γ(°)	81.0	82.0	83.0	84.0	85.0	86.0	87.0	88.0	89.0
0.0	10.86	10.80	10.80	10.74	10.74	10.74	10.69	10.63	10.58
45.0	10.63	10.58	10.58	10.58	10.52	10.52	10.46	10.41	10.29
90.0	10.91	10.86	10.74	10.63	10.46	10.41	10.35	10.35	10.29
135.0	10.52	10.46	10.52	10.41	10.41	10.35	10.35	10.29	10.29
180.0	10.46	10.41	10.41	10.41	10.41	10.41	10.35	10.29	10.29
225.0	10.46	10.41	10.41	10.35	10.41	10.35	10.35	10.29	10.24
270.0	10.80	10.74	10.69	10.63	10.52	10.41	10.35	10.29	10.24
315.0	10.52	10.52	10.46	10.41	10.41	10.41	10.35	10.29	10.29
360.0	10.86	10.80	10.80	10.74	10.74	10.74	10.69	10.63	10.58

Intensity data(cd)

C/γ(°)	90.0
0.0	10.41
45.0	10.29
90.0	10.29
135.0	10.24
180.0	10.18
225.0	10.24
270.0	10.18
315.0	10.24
360.0	10.41