NATA LIGHTING CO.,LTD.
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Tel:+86 571 85021543 Fax:+86 571 87977635
Address:Address:380JinOu Road,GaoXin Zone,Jiang Men City,Guangdong,China

NT

Client: NT
LumCAT: 61-0250
Luminaire: 92.70.427.00
Report No: 20250331-B002
Ballast type: DC

Test No: 20250331-C002	Voltage(V): 31.480
LampCAT: CITIZEN CLU703	Current(A): 0.350
Lamp flux(lm): 1205.3	Power (W): 11.018
Number of Lamps: 1	PF: 0.000
Length(mm): 35	Width(mm): 35
Phm Type: C	Height(mm): 17

Photometric Results

Lumens(lm): 1064.41, Efficiency(%): 88.31% , Luminous Efficacy(lm/W): 96.61
Central intensity(cd): 2932.036, Maximum intensity(cd): 2932.036
Angle of maximum intensity: C=0.0 γ=0.0
Beam Angle(50%Imax): [C0/180]Total=34.6
[C90/270]Total=34.6
Field angle(10%Imax): [C0/180]Total=52.4
[C90/270]Total=52.4
Maximum s/h(1/2): C0_180=0.59 C90_270=0.59
Maximum s/h(1/4): C0_180=0.55 C90_270=0.55
Up flux rate of lamp(%): 0.00%
Down flux rate of lamp(%): 88.31%
Up flux rate of LUM(%): - -
Down flux rate of LUM(%): 100.00%
CIE Type : Direct lighting
Output flux ratio in π solid angle : 97.421%

Zonal flux distribution table

γ(°)	Average I(cd)	Zonal F(lm)	Sum F(lm)	Eff Flux(%)	Eff Sum(%)
0.0	2932.036	0.000	0	0.00%	0.00%
1.0	2930.938	2.805	2.805	0.23%	0.26%
2.0	2927.939	8.409	11.215	0.70%	1.05%
3.0	2921.209	13.989	25.204	1.16%	2.37%
4.0	2908.115	19.513	44.716	1.62%	4.20%
5.0	2888.363	24.936	69.653	2.07%	6.54%
6.0	2858.590	30.202	99.854	2.51%	9.38%
7.0	2816.966	35.228	135.082	2.92%	12.69%
8.0	2762.759	39.933	175.015	3.31%	16.44%
9.0	2689.679	44.189	219.204	3.67%	20.59%
10.0	2607.309	47.936	267.14	3.98%	25.10%
11.0	2489.240	50.925	318.065	4.23%	29.88%
12.0	2370.439	53.123	371.189	4.41%	34.87%
13.0	2229.107	54.585	425.774	4.53%	40.00%
14.0	2078.119	55.132	480.906	4.57%	45.18%
15.0	1929.911	55.024	535.93	4.57%	50.35%
16.0	1754.783	53.991	589.921	4.48%	55.42%
17.0	1514.833	50.917	640.837	4.22%	60.21%
18.0	1342.652	47.114	687.951	3.91%	64.63%
19.0	1238.834	44.913	732.864	3.73%	68.85%
20.0	1079.352	42.429	775.293	3.52%	72.84%
21.0	917.113	38.336	813.629	3.18%	76.44%
22.0	774.538	33.994	847.624	2.82%	79.63%
23.0	631.758	29.508	877.132	2.45%	82.41%
24.0	505.210	24.858	901.99	2.06%	84.74%
25.0	397.192	20.519	922.508	1.70%	86.67%
26.0	305.473	16.586	939.095	1.38%	88.23%
27.0	243.790	13.438	952.533	1.11%	89.49%
28.0	219.079	11.719	964.252	0.97%	90.59%
29.0	121.207	8.903	973.154	0.74%	91.43%
30.0	89.239	5.682	978.836	0.47%	91.96%
31.0	68.691	4.395	983.231	0.36%	92.37%
32.0	56.116	3.576	986.807	0.30%	92.71%
33.0	48.113	3.071	989.878	0.25%	93.00%
34.0	43.116	2.761	992.639	0.23%	93.26%
35.0	39.364	2.562	995.2	0.21%	93.50%
36.0	36.430	2.413	997.613	0.20%	93.72%
37.0	33.628	2.285	999.898	0.19%	93.94%

Zonal flux distribution table

γ(°)	Average I(cd)	Zonal F(lm)	Sum F(lm)	Eff Flux(%)	Eff Sum(%)
38.0	31.105	2.161	1002.059	0.18%	94.14%
39.0	28.727	2.042	1004.101	0.17%	94.33%
40.0	26.452	1.924	1006.026	0.16%	94.51%
41.0	24.477	1.814	1007.839	0.15%	94.69%
42.0	22.670	1.713	1009.552	0.14%	94.85%
43.0	21.105	1.622	1011.174	0.13%	95.00%
44.0	19.722	1.541	1012.715	0.13%	95.14%
45.0	18.559	1.471	1014.186	0.12%	95.28%
46.0	17.645	1.416	1015.602	0.12%	95.41%
47.0	16.913	1.374	1016.976	0.11%	95.54%
48.0	16.459	1.349	1018.325	0.11%	95.67%
49.0	16.262	1.344	1019.669	0.11%	95.80%
50.0	16.335	1.359	1021.028	0.11%	95.92%
51.0	16.694	1.397	1022.425	0.12%	96.06%
52.0	17.242	1.456	1023.882	0.12%	96.19%
53.0	17.718	1.521	1025.402	0.13%	96.34%
54.0	18.113	1.579	1026.982	0.13%	96.48%
55.0	18.347	1.627	1028.609	0.14%	96.64%
56.0	18.427	1.662	1030.271	0.14%	96.79%
57.0	18.325	1.680	1031.951	0.14%	96.95%
58.0	18.105	1.685	1033.636	0.14%	97.11%
59.0	17.710	1.674	1035.31	0.14%	97.27%
60.0	17.169	1.648	1036.958	0.14%	97.42%
61.0	16.547	1.609	1038.567	0.13%	97.57%
62.0	15.823	1.560	1040.127	0.13%	97.72%
63.0	14.945	1.496	1041.623	0.12%	97.86%
64.0	14.082	1.424	1043.048	0.12%	97.99%
65.0	13.226	1.351	1044.399	0.11%	98.12%
66.0	12.443	1.281	1045.68	0.11%	98.24%
67.0	11.580	1.208	1046.888	0.10%	98.35%
68.0	10.819	1.135	1048.022	0.09%	98.46%
69.0	10.168	1.071	1049.093	0.09%	98.56%
70.0	9.451	1.008	1050.101	0.08%	98.66%
71.0	8.888	0.948	1051.049	0.08%	98.74%
72.0	8.361	0.897	1051.946	0.07%	98.83%
73.0	7.886	0.850	1052.795	0.07%	98.91%
74.0	7.476	0.808	1053.603	0.07%	98.98%
75.0	7.015	0.766	1054.369	0.06%	99.06%

Zonal flux distribution table

γ(°)	Average I(cd)	Zonal F(lm)	Sum F(lm)	Eff Flux(%)	Eff Sum(%)
76.0	6.672	0.727	1055.095	0.06%	99.12%
77.0	6.437	0.699	1055.794	0.06%	99.19%
78.0	6.342	0.684	1056.478	0.06%	99.25%
79.0	6.298	0.679	1057.157	0.06%	99.32%
80.0	6.240	0.676	1057.833	0.06%	99.38%
81.0	6.189	0.672	1058.505	0.06%	99.45%
82.0	6.159	0.670	1059.175	0.06%	99.51%
83.0	6.108	0.667	1059.842	0.06%	99.57%
84.0	6.086	0.664	1060.506	0.06%	99.63%
85.0	6.035	0.662	1061.168	0.05%	99.70%
86.0	5.991	0.657	1061.825	0.05%	99.76%
87.0	5.947	0.653	1062.479	0.05%	99.82%
88.0	5.969	0.653	1063.131	0.05%	99.88%
89.0	5.845	0.648	1063.779	0.05%	99.94%
90.0	5.662	0.631	1064.41	0.05%	100.00%

Zonal flux distribution table

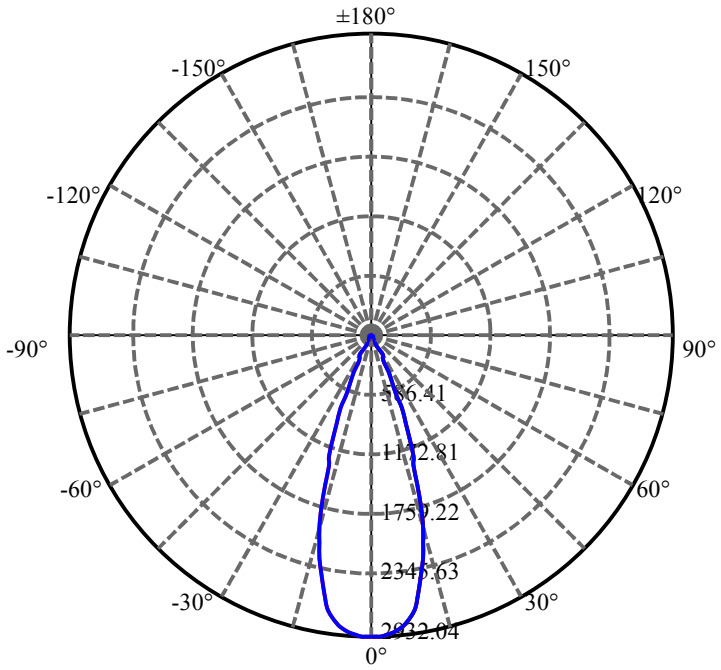
ZONAL LUMEN SUMMARY

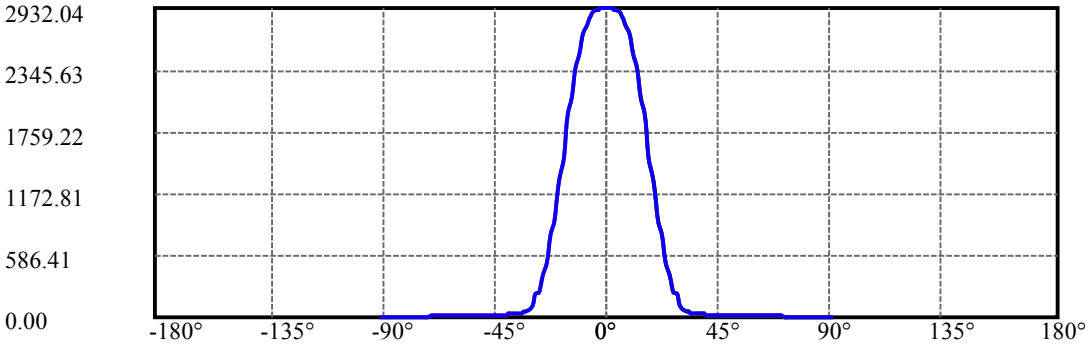
Zone	Lumens	%Lamp	%Fixt
0-30	978.84	81.21%	91.96%
0-40	1006.03	83.47%	94.51%
0-60	1036.96	86.03%	97.42%
0-90	1063.78	88.26%	99.94%
0-120	1063.78	88.26%	99.94%
0-180	1064.41	88.31%	100.00%
60-90	26.82	2.23%	2.52%
90-120	0.00	0.00%	0.00%
90-130	0.00	0.00%	0.00%
90-150	0.00	0.00%	0.00%
90-180	0.00	0.00%	0.00%
0-22.13	851.53	70.65%	80.00%

ZONAL LUMEN SUMMARY

0-10	267.14
10-20	508.15
20-30	203.54
30-40	27.19
40-50	15.00
50-60	15.93
60-70	13.14
70-80	7.73
80-90	5.95
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]





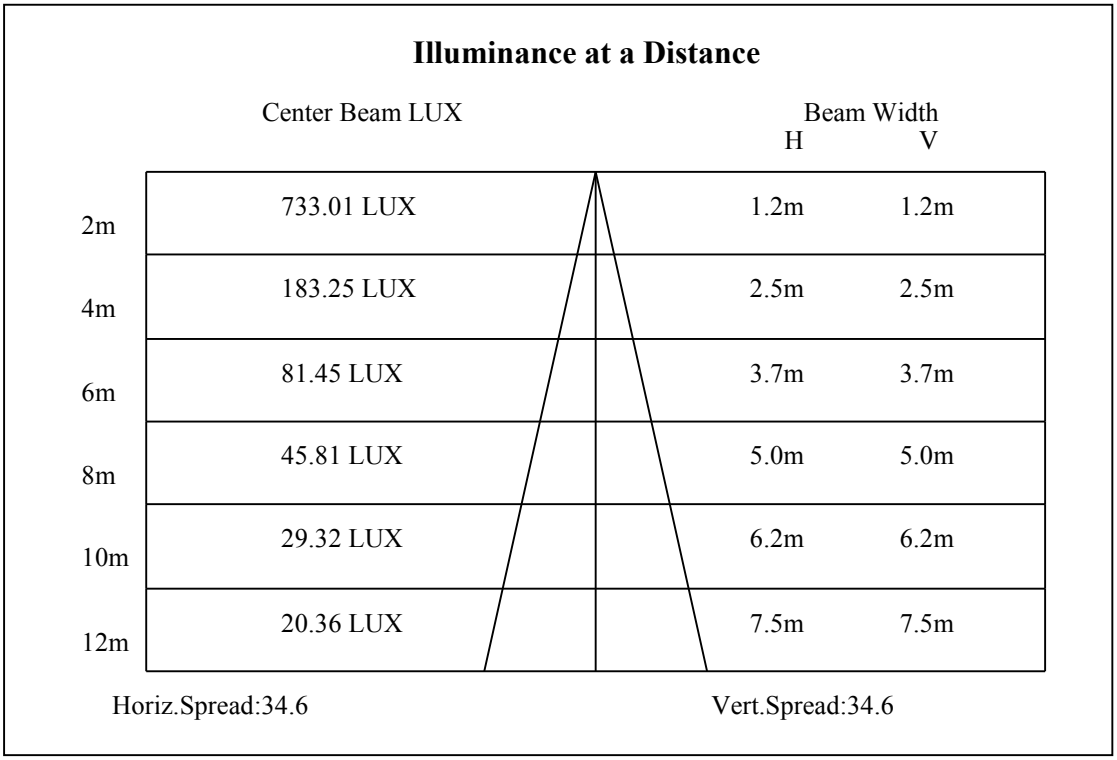
C0(Max):

C0/C180:

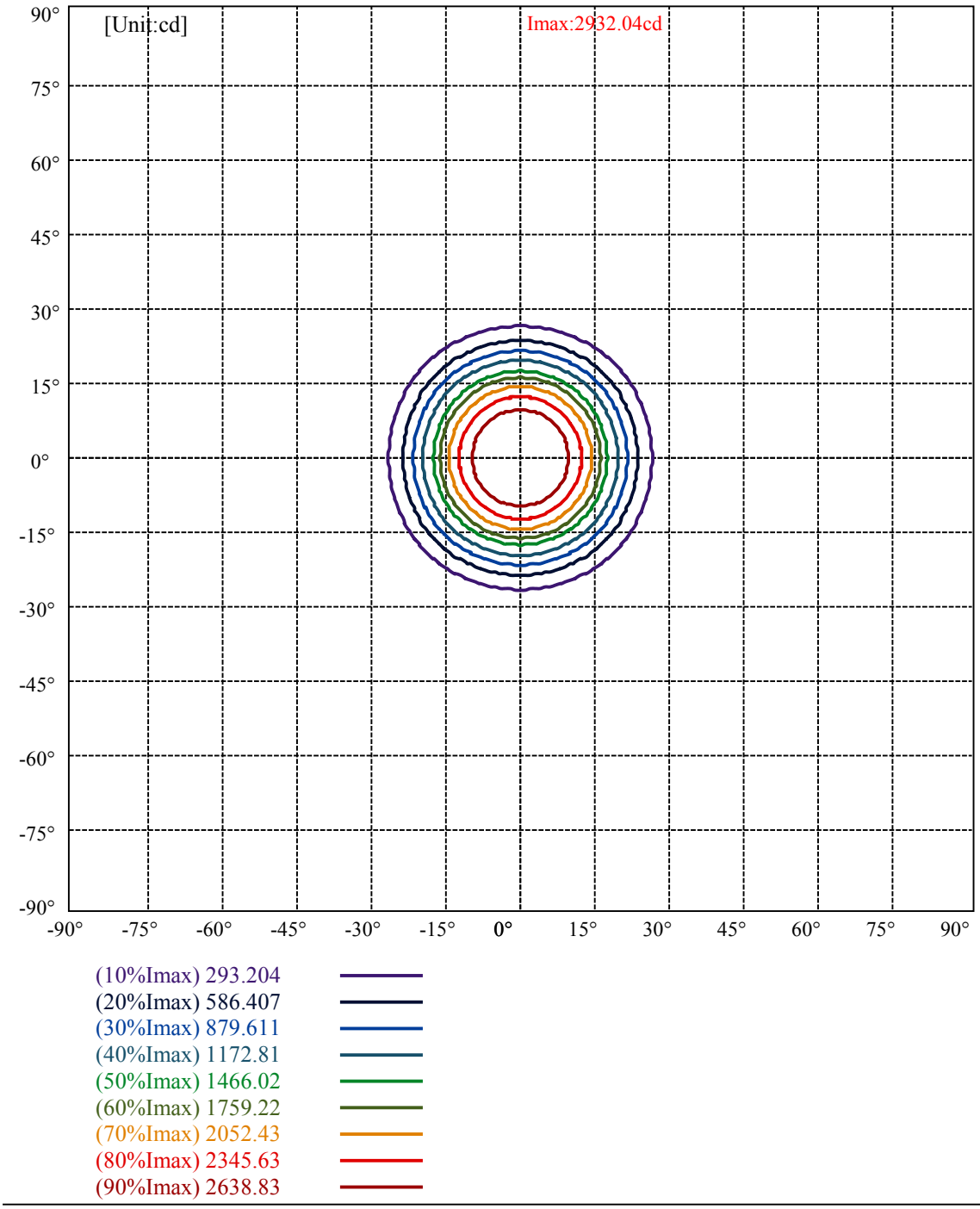
C90/C270:

Field angle(10%Imax):C0/180Left:26.2 Right:26.2
:C90/270Left:26.2 Right:26.2

Beam Angle(50%Imax):C0/180Left:17.3 Right:17.3
:C90/270Left:17.3 Right:17.3


Illuminance at a Distance
Center Beam LUX
Beam Width
H
V
2m
733.01 LUX
1.2m
1.2m
4m
183.25 LUX
2.5m
2.5m
6m
81.45 LUX
3.7m
3.7m
8m
45.81 LUX
5.0m
5.0m
10m
29.32 LUX
6.2m
6.2m
12m
20.36 LUX
7.5m
7.5m
Horiz.Spread:34.6
Vert.Spread:34.6

ISO-Intensity(V-H)



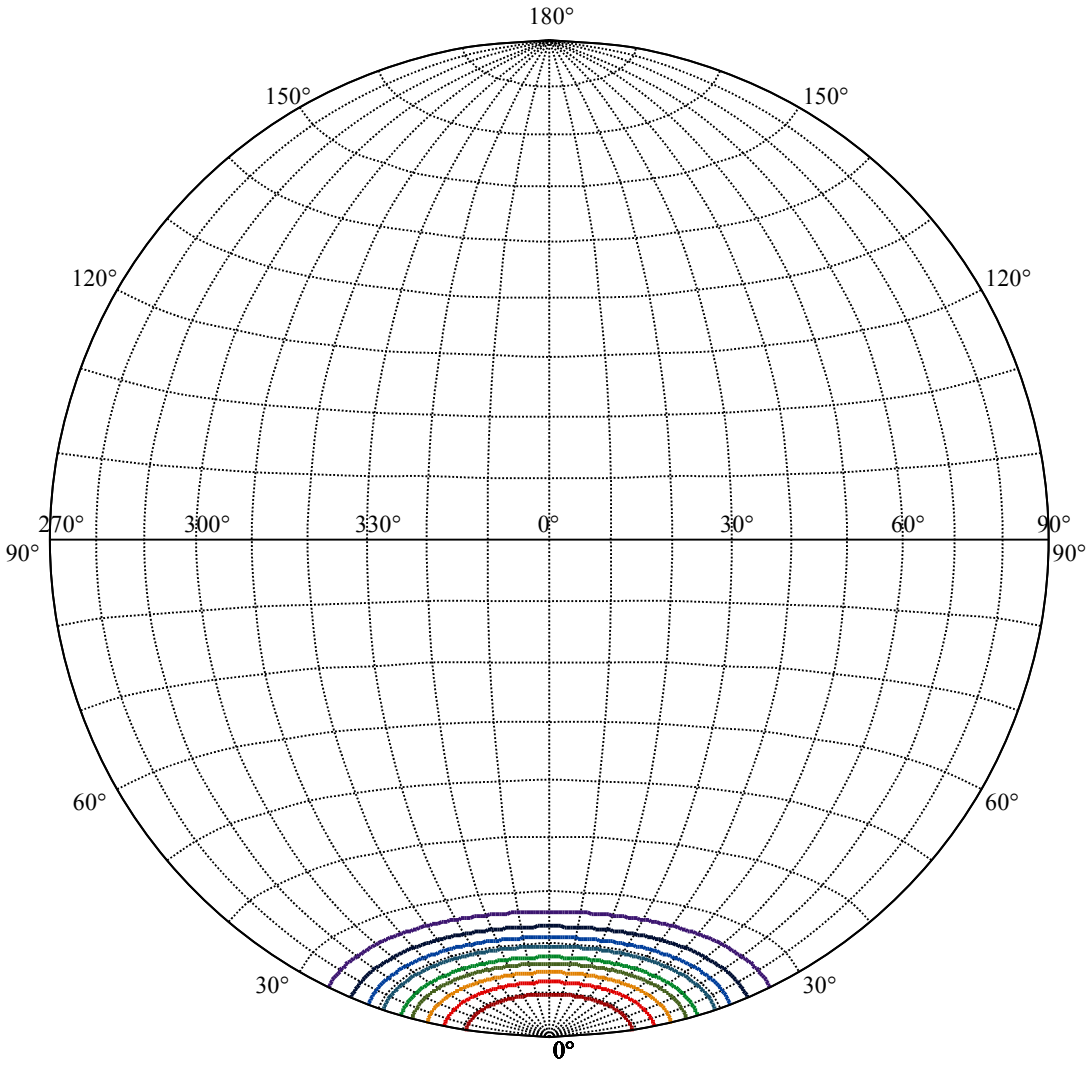
(10%Imax) 293.204
(20%Imax) 586.407
(30%Imax) 879.611
(40%Imax) 1172.81
(50%Imax) 1466.02
(60%Imax) 1759.22
(70%Imax) 2052.43
(80%Imax) 2345.63
(90%Imax) 2638.83

Equipment: GMS1980
Temperature(°C): 25.0

Date: 2025/3/31
Humidity(%): 60.0%

Operator: NT07
Distance(m): 7.65

ISO candela diagram on circular web



House [Unit:cd] Road

Imax:2932.04

(10%Imax) 293.204
(20%Imax) 586.407
(30%Imax) 879.611
(40%Imax) 1172.81
(50%Imax) 1466.02
(60%Imax) 1759.22
(70%Imax) 2052.43
(80%Imax) 2345.63
(90%Imax) 2638.83

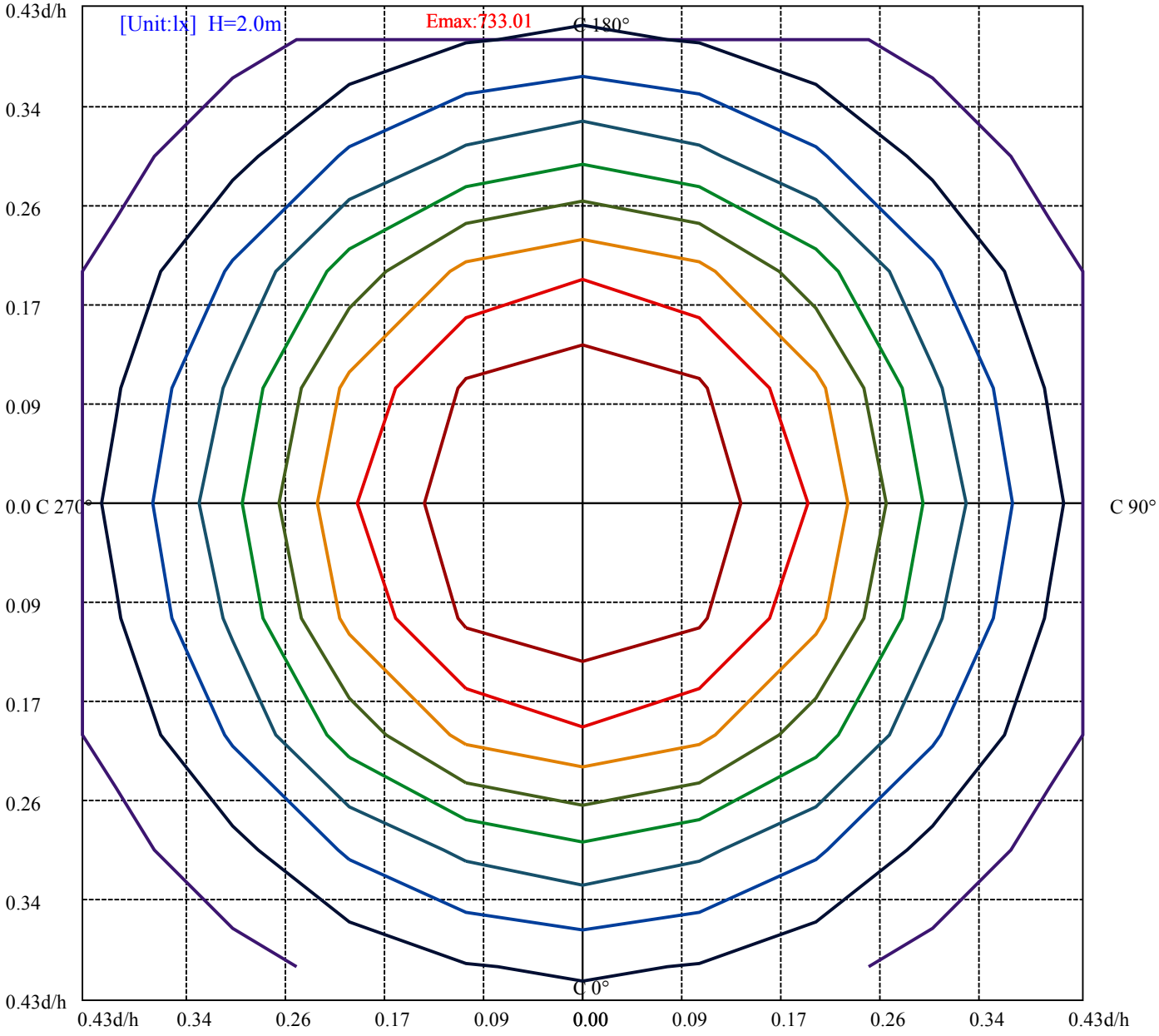
Equipment: GMS1980
Temperature(°C): 25.0

Date: 2025/3/31
Humidity(%): 60.0%

Operator: NT07
Distance(m): 7.65

NT NT 61-0250

ISO illuminance diagram



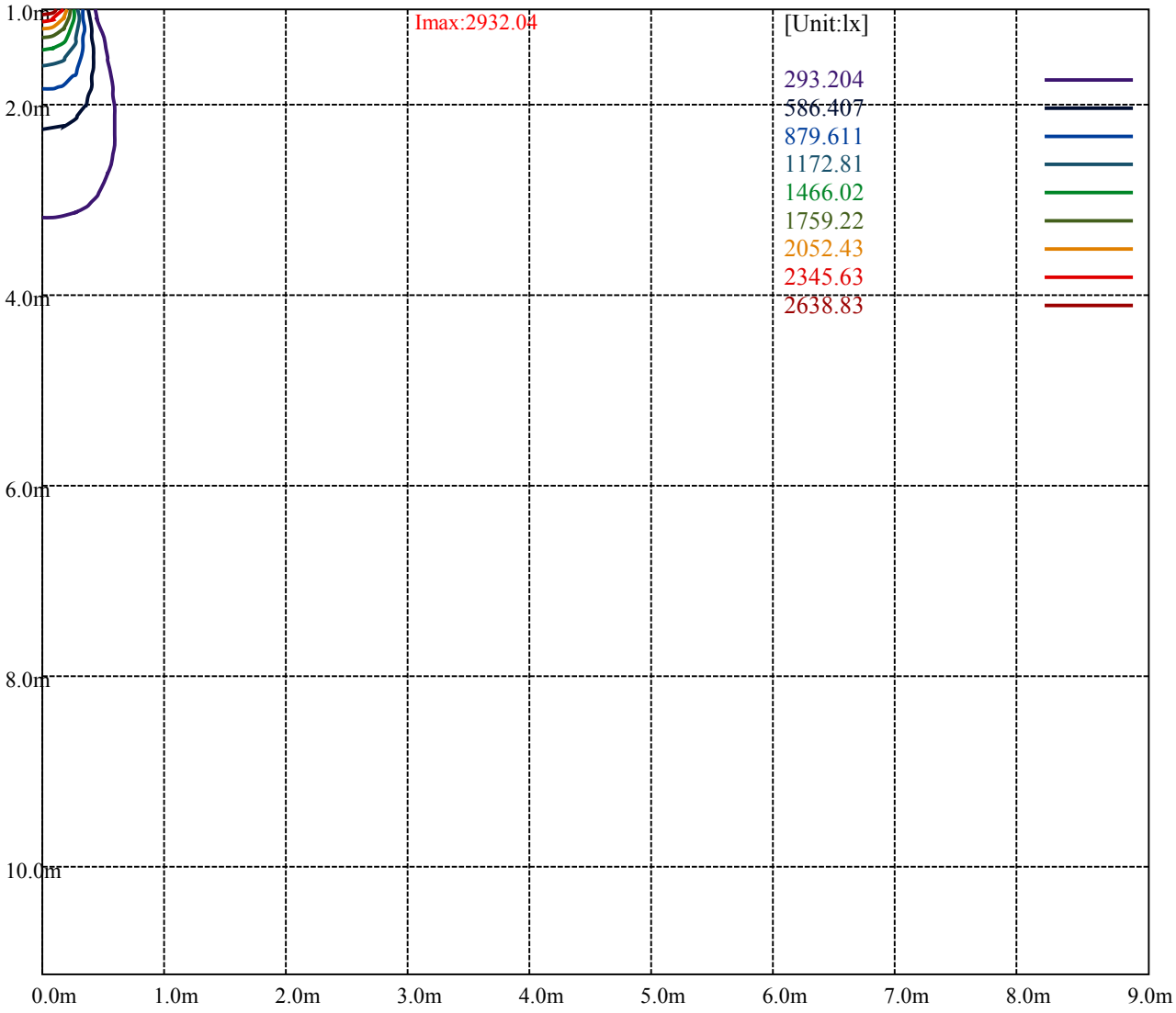
(10%Emax) 73.301
(20%Emax) 146.6017
(30%Emax) 219.9028
(40%Emax) 293.2025
(50%Emax) 366.505
(60%Emax) 439.805
(70%Emax) 513.1075
(80%Emax) 586.4075
(90%Emax) 659.7075

Equipment: GMS1980
Temperature(°C): 25.0

Date: 2025/3/31
Humidity(%): 60.0%

Operator: NT07
Distance(m): 7.65

Space ISO Lux diagram



Equipment: GMS1980
Temperature(°C): 25.0

Date: 2025/3/31
Humidity(%): 60.0%

Operator: NT07
Distance(m): 7.65

Luminance Limitting Curve(no luminous side)

Luminance Table

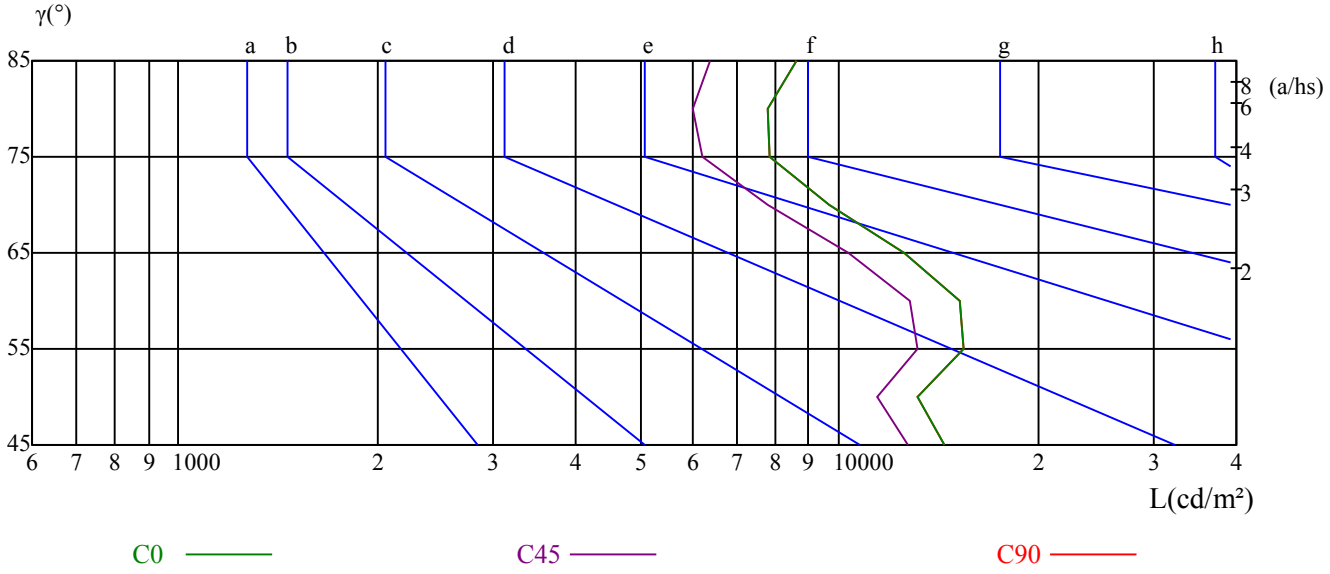
γ	45	50	55	60	65	70	75	80	85
C0	14421	13139	15417	15224	12513	9663	7867	7813	8628
C45	12701	11407	13181	12801	10330	7813	6209	5992	6386
C90	14421	13139	15417	15224	12513	9663	7867	7813	8628

L(Hor)(65)	L(Ver)(65)	L45(65)	L(Hor)(75)	L(Ver)(75)	L45(75)	L(Hor)(85)	L(Ver)(85)	L45(85)
25547	25547	25547	22127	22127	22127	56527	56527	56527

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

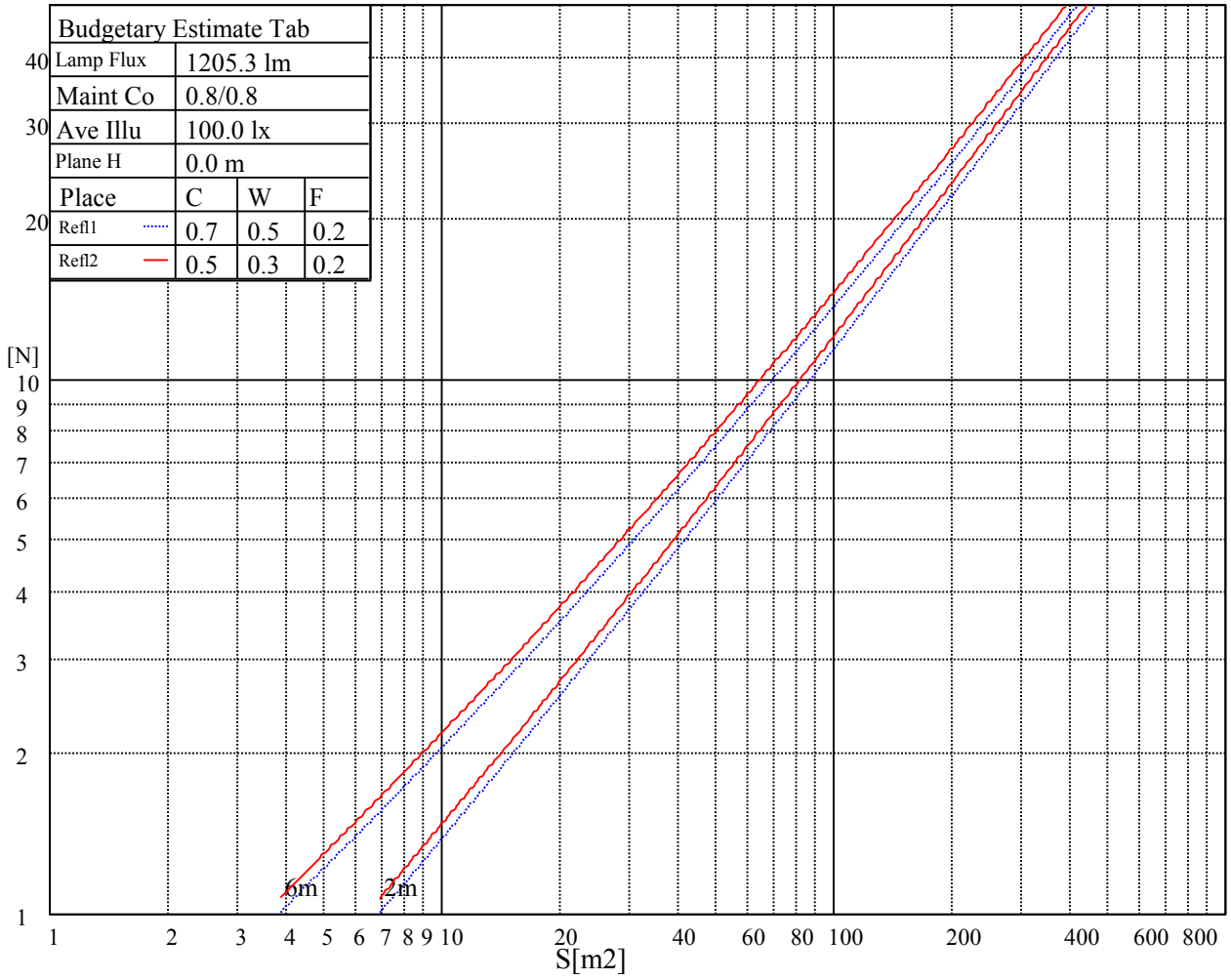


Illumination assessment according UGR											
Rf of Ceiling		70	70	50	50	30	70	70	50	50	30
Rf of Wall		50	30	50	30	30	50	30	50	30	30
Rf of Floor		20	20	20	20	20	20	20	20	20	20
Room dimensions		Viewed crosswise					Viewed endwise				
X	Y										
2H	2H	14.13	15.10	14.50	15.41	15.73	14.00	14.97	14.36	15.28	15.59
	3H	15.48	16.35	15.87	16.68	17.03	15.34	16.20	15.73	16.54	16.88
	4H	15.95	16.75	16.35	17.10	17.47	15.81	16.60	16.21	16.96	17.33
	6H	16.49	17.22	16.91	17.60	18.00	16.32	17.05	16.73	17.42	17.82
	8H	16.78	17.48	17.21	17.87	18.28	16.61	17.31	17.03	17.70	18.10
	12H	17.12	17.78	17.54	18.17	18.59	16.96	17.62	17.38	18.01	18.43
4H	2H	14.71	15.51	15.11	15.86	16.23	14.61	15.40	15.01	15.76	16.13
	3H	16.14	16.81	16.57	17.21	17.62	16.02	16.69	16.45	17.09	17.51
	4H	16.75	17.33	17.19	17.76	18.21	16.63	17.21	17.07	17.64	18.09
	6H	17.39	17.90	17.86	18.36	18.81	17.23	17.75	17.71	18.20	18.65
	8H	17.79	18.26	18.27	18.72	19.20	17.64	18.12	18.12	18.57	19.05
	12H	18.24	18.68	18.73	19.13	19.65	18.11	18.54	18.60	19.00	19.52
8H	4H	16.90	17.38	17.39	17.84	18.31	16.79	17.27	17.28	17.73	18.20
	6H	17.73	18.12	18.23	18.60	19.11	17.59	17.98	18.09	18.46	18.97
	8H	18.31	18.64	18.85	19.16	19.66	18.18	18.51	18.72	19.03	19.53
	12H	18.95	19.20	19.49	19.71	20.24	18.83	19.08	19.37	19.60	20.12
12H	4H	16.92	17.36	17.41	17.81	18.33	16.82	17.26	17.31	17.71	18.23
	6H	17.86	18.18	18.39	18.71	19.20	17.72	18.05	18.26	18.57	19.07
	8H	18.48	18.73	19.02	19.25	19.77	18.36	18.61	18.90	19.12	19.65

Variation with the observer position at spacings:		
S = 1.0H	0.4/-0.7	0.4/-0.7
S = 1.5H	0.8/-1.0	0.8/-1.0
S = 2.0H	1.1/-0.9	1.1/-0.9
Standard tables:	BKBF	BKBF
Uncorrected UGR	2.6	2.6

UGR calculation is based on CIE Publ. 117 ,S/H = 0.25

Budgetary Estimate Table

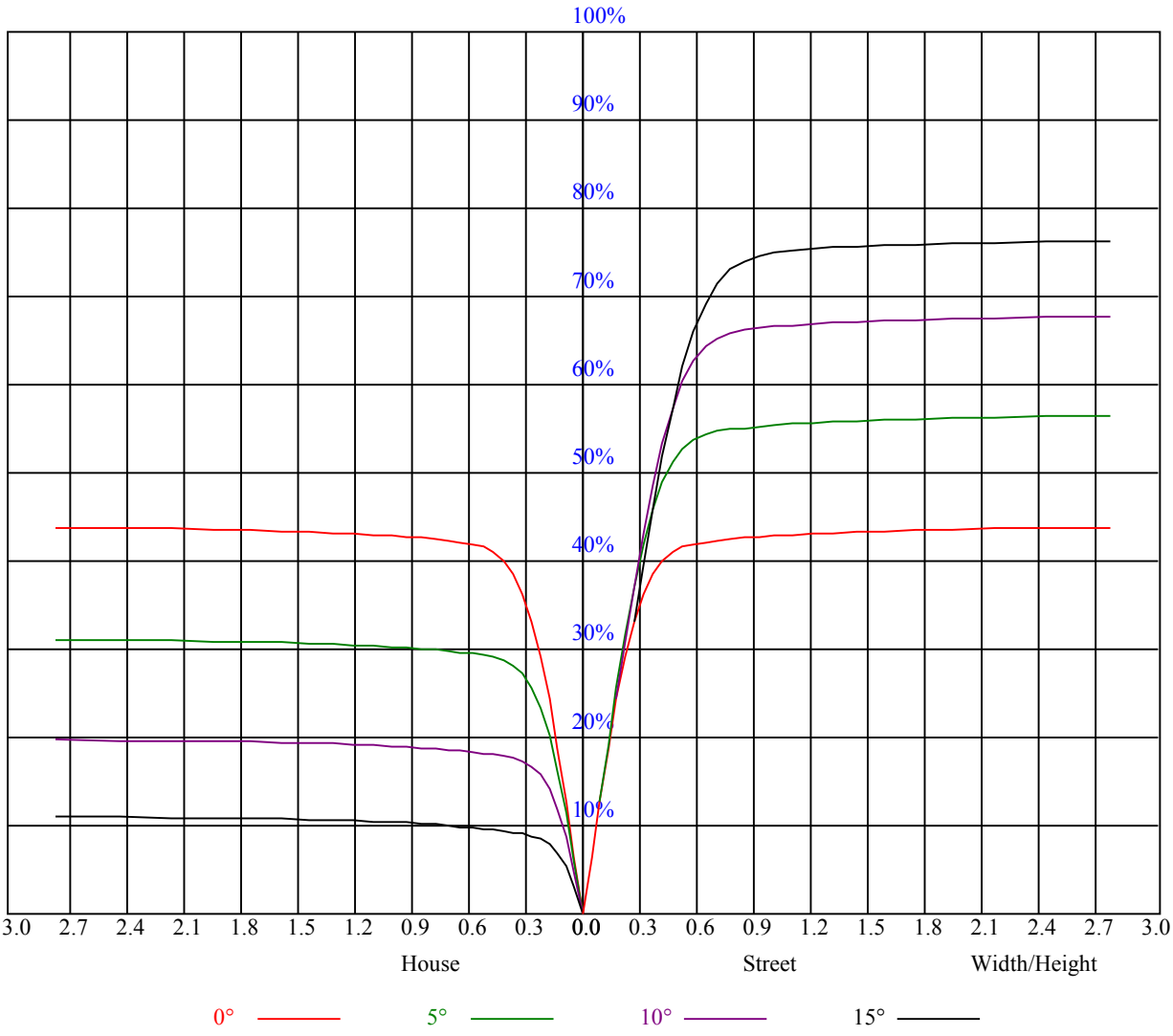


Equipment: GMS1980 Date: 2025/3/31 Operator: NT07
Temperature(°C): 25.0 Humidity(%): 60.0% Distance(m): 7.65

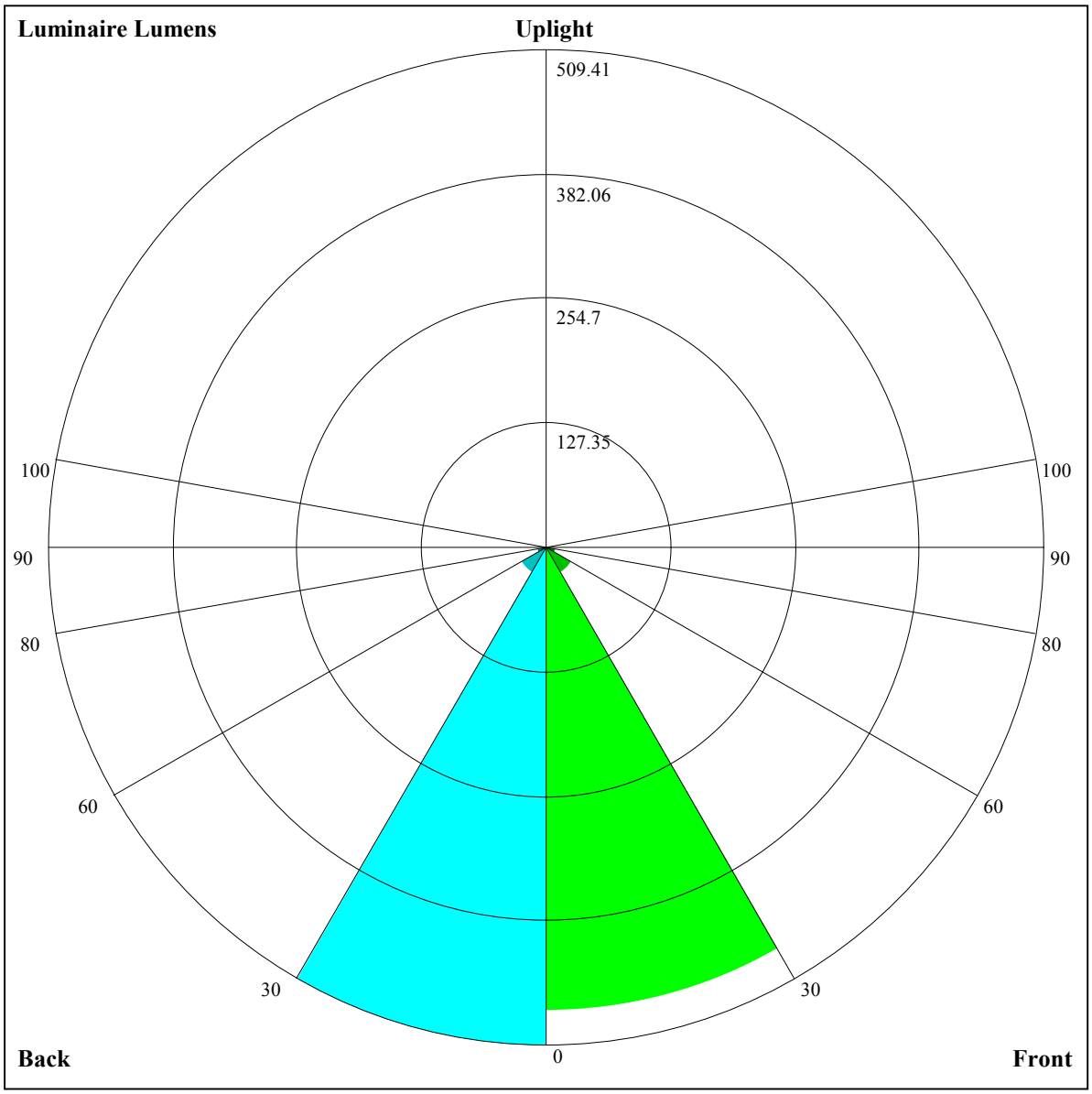
Utilization factor table for indoor luminaire

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	1.05	1.05	1.05	1.03	1.03	1.03	0.98	0.98	0.98	0.94	0.94	0.94	0.90	0.90	0.90	0.88
1	0.99	0.97	0.95	0.97	0.95	0.93	0.93	0.92	0.91	0.90	0.89	0.88	0.87	0.86	0.85	0.84
2	0.93	0.90	0.88	0.92	0.89	0.87	0.89	0.87	0.85	0.86	0.85	0.83	0.84	0.83	0.81	0.80
3	0.89	0.85	0.82	0.87	0.84	0.81	0.85	0.82	0.80	0.83	0.81	0.79	0.81	0.79	0.78	0.76
4	0.84	0.81	0.77	0.84	0.80	0.77	0.82	0.79	0.76	0.80	0.77	0.75	0.79	0.76	0.74	0.73
5	0.81	0.77	0.74	0.80	0.76	0.73	0.79	0.75	0.73	0.77	0.74	0.72	0.76	0.74	0.72	0.70
6	0.78	0.73	0.70	0.77	0.73	0.70	0.76	0.72	0.70	0.75	0.72	0.69	0.74	0.71	0.69	0.68
7	0.75	0.71	0.68	0.74	0.70	0.67	0.73	0.70	0.67	0.72	0.69	0.67	0.71	0.69	0.66	0.65
8	0.72	0.68	0.65	0.72	0.68	0.65	0.71	0.67	0.65	0.70	0.67	0.64	0.69	0.66	0.64	0.63
9	0.70	0.65	0.63	0.69	0.65	0.63	0.68	0.65	0.62	0.68	0.65	0.62	0.67	0.64	0.62	0.61
10	0.67	0.63	0.61	0.67	0.63	0.61	0.66	0.63	0.60	0.66	0.62	0.60	0.65	0.62	0.60	0.59

Coefficient Utilization Curve



Equipment: GMS1980	Date: 2025/3/31	Operator: NT07
Temperature(°C): 25.0	Humidity(%): 60.0%	Distance(m): 7.65



Luminaire Lumens:
FL=473.46,FM=29.3,FH=10.39,FVH=3.28
BL=509.41,BM=29.02,BH=10.44,BVH=3.26
UL=0,UH=0

BUG Rating:B2-U0-G0

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	2924.43	2898.68	2870.00	2834.30	2783.97	2734.23	2664.00	2594.36	2511.26
45.0	2939.64	2926.18	2910.38	2889.31	2857.71	2827.28	2792.75	2737.16	2680.97
90.0	2930.87	2925.60	2920.92	2916.23	2907.46	2893.41	2864.15	2826.11	2772.27
135.0	2933.21	2940.81	2946.67	2951.35	2953.10	2948.42	2932.62	2908.63	2873.51
180.0	2924.43	2938.47	2949.01	2954.86	2953.10	2937.89	2917.99	2888.14	2849.52
225.0	2939.64	2954.86	2963.64	2965.98	2960.13	2940.81	2913.31	2873.51	2803.29
270.0	2930.87	2935.55	2944.91	2954.27	2964.22	2965.98	2960.13	2944.91	2910.97
315.0	2933.21	2927.35	2917.99	2903.36	2885.22	2858.88	2823.77	2762.91	2700.29
360.0	2924.43	2898.68	2870.00	2834.30	2783.97	2734.23	2664.00	2594.36	2511.26

C/γ(°)	9.0	10.0	11.0	12.0	13.0	14.0	15.0	16.0	17.0
0.0	2393.04	2289.46	2177.68	2058.29	1900.28	1770.36	1634.59	1494.14	1147.92
45.0	2593.78	2508.33	2411.77	2275.41	2152.52	2017.33	1875.12	1691.36	1542.71
90.0	2700.29	2608.41	2466.20	2331.01	2138.47	1978.12	1812.50	1601.23	1150.90
135.0	2823.77	2755.30	2644.69	2537.59	2414.11	2241.47	2089.90	1926.62	1756.90
180.0	2784.56	2716.09	2603.14	2494.87	2376.66	2216.89	2075.27	1926.03	1732.32
225.0	2730.13	2640.59	2508.33	2388.95	2225.08	2083.46	1932.47	1775.05	1611.18
270.0	2869.42	2810.89	2707.31	2601.97	2478.49	2341.54	2191.14	1986.90	1817.77
315.0	2622.45	2529.40	2394.80	2275.41	2147.25	1975.78	1828.30	1636.93	1358.95
360.0	2393.04	2289.46	2177.68	2058.29	1900.28	1770.36	1634.59	1494.14	1147.92

C/γ(°)	18.0	19.0	20.0	21.0	22.0	23.0	24.0	25.0	26.0
0.0	1147.92	1046.91	882.75	757.63	640.70	507.45	412.35	330.94	246.32
45.0	1395.23	1251.85	1111.99	942.27	813.52	663.70	553.10	451.85	341.24
90.0	1150.90	1072.72	922.02	778.99	645.68	495.69	391.75	305.25	234.21
135.0	1542.13	1373.58	1167.58	1006.06	852.15	673.65	547.83	433.71	336.56
180.0	1577.24	1417.47	1247.76	1050.54	905.99	770.21	630.35	489.89	388.06
225.0	1162.96	1162.96	1084.83	932.61	753.18	620.98	499.26	366.29	276.52
270.0	1605.92	1426.25	1247.17	1040.59	890.77	750.90	571.24	455.36	354.12
315.0	1158.92	1158.92	970.71	828.21	694.31	571.47	435.82	344.23	266.75
360.0	1147.92	1046.91	882.75	757.63	640.70	507.45	412.35	330.94	246.32

C/γ(°)	27.0	28.0	29.0	30.0	31.0	32.0	33.0	34.0	35.0
0.0	190.67	147.30	114.47	85.56	70.05	59.34	52.03	45.94	42.14
45.0	303.21	303.21	145.96	112.95	88.72	72.10	58.41	51.09	46.00
90.0	164.68	123.72	93.87	68.88	56.36	46.76	42.25	39.03	35.52
135.0	295.01	295.01	131.27	98.49	71.40	58.00	49.04	43.66	39.21
180.0	296.77	296.77	151.11	110.43	76.84	60.86	50.74	43.89	40.38
225.0	188.33	136.30	98.79	68.94	55.36	47.34	42.66	39.62	36.46
270.0	307.89	307.89	128.16	93.05	69.93	53.31	45.94	41.67	38.16
315.0	203.78	142.44	106.04	75.61	60.86	51.21	43.83	40.03	37.04
360.0	190.67	147.30	114.47	85.56	70.05	59.34	52.03	45.94	42.14

C/γ(°)	36.0	37.0	38.0	39.0	40.0	41.0	42.0	43.0	44.0
0.0	38.16	35.23	32.66	29.55	27.39	25.40	23.17	21.65	20.31
45.0	42.14	38.10	35.23	32.54	29.55	27.45	25.46	23.29	21.77
90.0	33.01	30.72	28.50	26.45	24.23	22.53	20.95	19.66	18.26
135.0	36.40	33.24	30.90	28.62	25.98	24.17	22.47	21.01	19.43
180.0	37.40	34.88	31.89	29.67	27.62	25.63	23.47	21.89	20.42
225.0	34.18	31.95	29.79	27.27	25.40	23.23	21.71	20.37	18.96
270.0	35.76	33.47	30.72	28.62	26.63	24.35	22.65	21.19	19.90
315.0	34.41	31.43	29.14	27.10	24.81	23.06	21.48	19.78	18.73
360.0	38.16	35.23	32.66	29.55	27.39	25.40	23.17	21.65	20.31

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	19.14	17.97	17.21	16.74	16.44	16.33	16.44	16.74	17.15
45.0	20.07	19.02	18.08	17.32	16.80	16.44	16.39	16.56	16.80
90.0	17.38	16.56	16.09	15.80	15.74	16.04	16.39	17.03	17.44
135.0	18.43	17.56	16.80	16.15	16.04	16.33	17.26	18.43	19.43
180.0	18.96	17.97	16.97	16.39	16.09	15.98	16.15	16.56	16.97
225.0	18.08	17.32	16.74	16.62	16.62	16.85	17.32	17.73	18.14
270.0	18.61	17.79	17.09	16.68	16.56	16.85	17.38	18.32	18.90
315.0	17.79	16.97	16.33	15.98	15.80	15.86	16.21	16.56	16.91
360.0	19.14	17.97	17.21	16.74	16.44	16.33	16.44	16.74	17.15

C/γ(°)	54.0	55.0	56.0	57.0	58.0	59.0	60.0	61.0	62.0
0.0	17.44	17.67	17.79	17.79	17.62	17.26	16.85	16.27	15.51
45.0	17.21	17.50	17.73	17.79	17.73	17.50	17.15	16.68	15.92
90.0	17.73	17.91	18.02	17.91	17.67	17.32	16.74	16.09	15.33
135.0	20.13	20.31	20.13	19.84	19.37	18.67	17.67	17.03	16.27
180.0	17.38	17.85	18.14	18.26	18.26	18.08	17.73	17.15	16.50
225.0	18.43	18.61	18.55	18.38	18.02	17.62	16.91	16.21	15.45
270.0	19.25	19.37	19.31	18.96	18.61	18.08	17.62	16.85	16.21
315.0	17.32	17.56	17.73	17.67	17.56	17.15	16.68	16.09	15.39
360.0	17.44	17.67	17.79	17.79	17.62	17.26	16.85	16.27	15.51

C/γ(°)	63.0	64.0	65.0	66.0	67.0	68.0	69.0	70.0	71.0
0.0	14.57	13.75	12.99	12.23	11.35	10.65	10.07	9.36	8.90
45.0	15.22	14.46	13.69	12.93	12.00	11.35	10.65	9.95	9.31
90.0	14.34	13.52	12.52	11.76	11.06	10.42	9.77	9.01	8.54
135.0	15.51	14.46	13.64	12.87	11.88	11.06	10.30	9.42	8.90
180.0	15.80	14.75	13.93	13.11	12.11	11.35	10.71	10.07	9.36
225.0	14.34	13.52	12.70	11.94	11.12	10.30	9.71	9.13	8.60
270.0	15.39	14.57	13.52	12.64	11.82	10.94	10.24	9.48	8.90
315.0	14.40	13.64	12.82	12.06	11.29	10.48	9.89	9.19	8.60
360.0	14.57	13.75	12.99	12.23	11.35	10.65	10.07	9.36	8.90

C/γ(°)	72.0	73.0	74.0	75.0	76.0	77.0	78.0	79.0	80.0
0.0	8.31	7.90	7.49	7.14	6.85	6.73	6.67	6.61	6.44
45.0	8.78	8.19	7.78	7.37	6.91	6.61	6.50	6.44	6.38
90.0	8.08	7.72	7.55	6.85	6.50	6.32	6.26	6.20	6.14
135.0	8.37	7.72	7.37	6.91	6.55	6.20	6.09	6.03	6.03
180.0	8.84	8.37	7.90	7.43	7.02	6.67	6.55	6.50	6.38
225.0	8.02	7.61	7.08	6.67	6.44	6.26	6.26	6.26	6.20
270.0	8.43	7.96	7.43	6.96	6.61	6.32	6.14	6.09	6.09
315.0	8.08	7.61	7.20	6.79	6.50	6.38	6.26	6.26	6.26
360.0	8.31	7.90	7.49	7.14	6.85	6.73	6.67	6.61	6.44

C/γ(°)	81.0	82.0	83.0	84.0	85.0	86.0	87.0	88.0	89.0
0.0	6.26	6.20	6.09	6.09	6.03	5.97	5.97	6.03	5.79
45.0	6.32	6.32	6.26	6.26	6.20	6.14	6.09	6.09	6.03
90.0	6.14	6.09	6.03	6.03	5.97	5.91	5.91	5.91	5.68
135.0	6.03	5.97	5.97	5.91	5.91	5.85	5.85	5.91	5.79
180.0	6.32	6.26	6.26	6.20	6.14	6.14	6.03	6.03	6.03
225.0	6.20	6.14	6.09	6.09	6.09	6.03	5.97	5.97	5.91
270.0	6.03	6.09	6.03	6.03	5.91	5.91	5.85	5.91	5.79
315.0	6.20	6.20	6.14	6.09	6.03	5.97	5.91	5.91	5.74
360.0	6.26	6.20	6.09	6.09	6.03	5.97	5.97	6.03	5.79

Intensity data(cd)

C/γ(°)	90.0
0.0	5.62
45.0	5.85
90.0	5.56
135.0	5.38
180.0	5.85
225.0	5.79
270.0	5.56
315.0	5.68
360.0	5.62