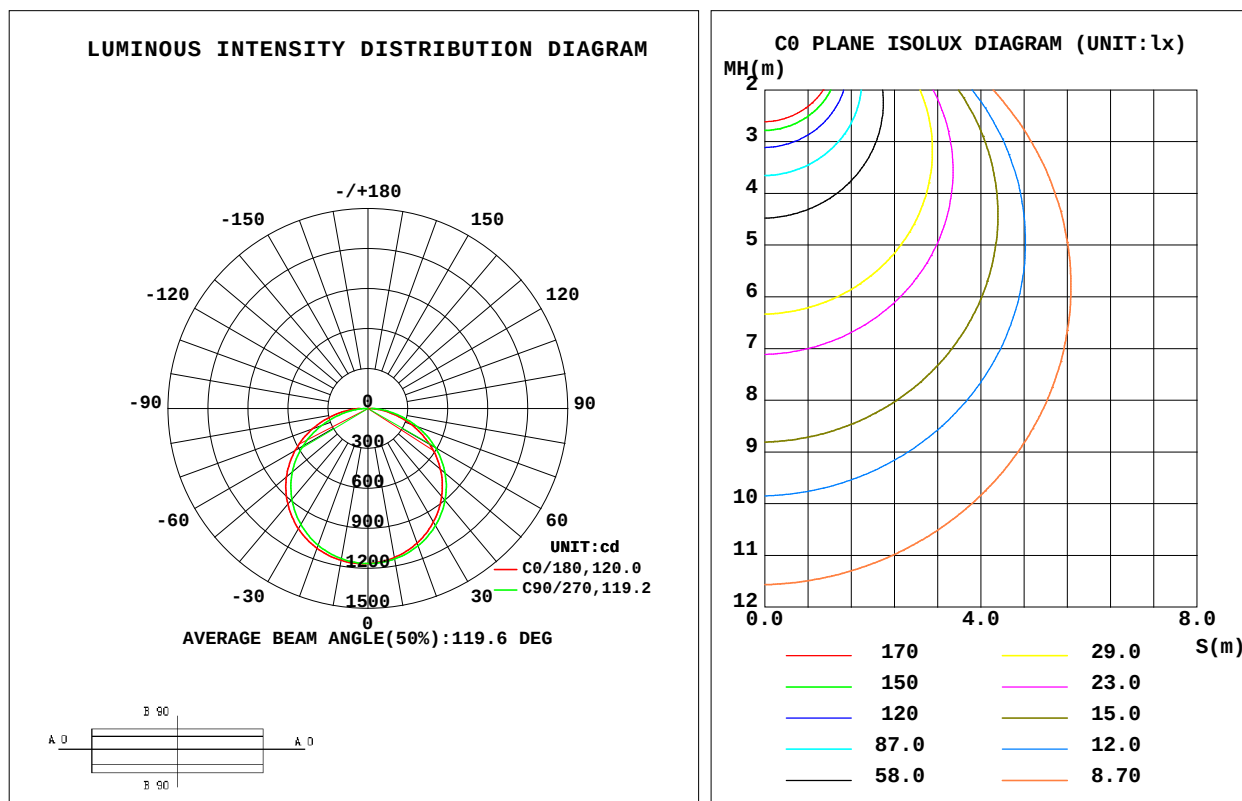


EVERFINE GONIOPHOTOMETERS SYSTEM TEST REPORT

LUMINAIRE PHOTOMETRIC TEST REPORT

Test:U:120.34V I:0.2156A P:25.568W PF:0.9853 Freq:59.98Hz Lamp Flux:3636.76x1 lm		
NAME:	TYPE:	WEIGHT:
SPEC.:100-277v	DIM.:	SERIAL No.:
MFR.:	SUR.:	Shielding Angle:

DATA OF LAMP		PHOTOMETRIC DATA Eff: 142.24 lm/W			
MODEL		I _{max} (cd)	1166	S/MH(C0/180)	1.33
NOMINAL POWER(W)		LOR(%)	100.0	S/MH(C90/270)	1.29
RATED VOLTAGE(V)	120-277	TOTAL FLUX(lm)	3636.8	h UP, DN(C0-180)	0.0,48.6
NOMINAL FLUX(lm)	3636.76	CIE CLASS	DIRECT	h UP, DN(C180-360)	0.0,51.4
LAMPS INSIDE	1	h up(%)	0.0	CIBSE SHR NOM	1.50
TEST VOLTAGE(V)	120	h down(%)	100.0	CIBSE SHR MAX	1.50



C Range: 0 - 360DEG
C Interval: 90.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:
Test Date:13 March 2024

α Range: 0 - 90DEG
α Interval: 1.0DEG
Test System:EVERFINE G0-2000B_V1 SYSTEM V2.0.400
Humidity:65.0%
Test Distance:8.300m [K=1.0723]
Remarks:

EVERFINE GONIOPHOTOMETERS SYSTEM TEST REPORT

ZONAL FLUX DIAGRAM

ZONAL FLUX DIAGRAM:

g	C0	C90	C180	C270					g	F zone	F total	%lum, lamp
10	1136	1147	1157	1145					0- 10	110.3	110.3	3.03, 3.03
20	1076	1097	1117	1093					10- 20	317.8	428.1	11.8, 11.8
30	983.8	1014	1044	1007					20- 30	487.8	915.9	25.2, 25.2
40	861.0	900.1	936.6	889.4					30- 40	599.7	1516	41.7, 41.7
50	710.1	756.6	799.6	742.4					40- 50	638.8	2154	59.2, 59.2
60	534.9	584.1	632.0	565.0					50- 60	597.2	2752	75.7, 75.7
70	340.4	388.5	441.0	365.5					60- 70	477.5	3229	88.8, 88.8
80	149.0	188.0	239.1	165.6					70- 80	299.2	3528	97, 97
90	0.4334	25.16	58.36	10.86					80- 90	108.4	3637	100, 100
100									90-100			
110									100-110			
120									110-120			
130									120-130			
140									130-140			
150									140-150			
160									150-160			
170									160-170			
180									170-180			
DEG	LUMINOUS INTENSITY:cd									UNIT: lm		

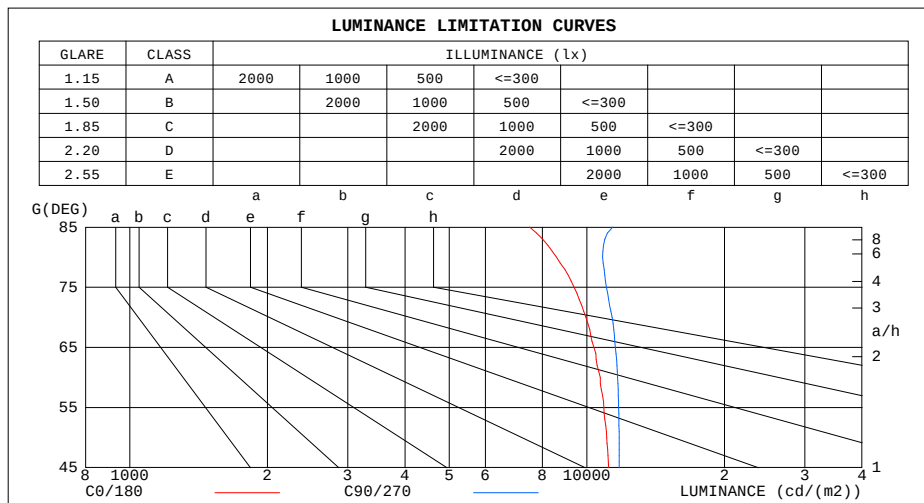
C Range: 0 - 360DEG
C Interval: 90.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:
Test Date:13 March 2024

g Range: 0 - 90DEG
g Interval: 1.0DEG
Test System:EVERFINE G0-2000B_V1 SYSTEM V2.0.400
Humidity:65.0%
Test Distance:8.300m [K=1.0723]
Remarks:

EVERFINE GONIOPHOTOMETERS SYSTEM TEST REPORT

LUMINANCE LIMITATION CURVES

Test:U:120.34V I:0.2156A P:25.568W PF:0.9853 Freq:59.98Hz Lamp Flux:3636.76x1 lm		
NAME:	TYPE:	WEIGHT:
SPEC.:100-277v	DIM.:	SERIAL No.:
MFR.:	SUR.:	Shielding Angle:



LUMINANCE cd/(m2)		
G(DEG)	C0/180	C90/270
85	7496	11399
80	8579	10828
75	9373	11038
70	9954	11358
65	10365	11555
60	10697	11682
55	10892	11743
50	11048	11770
45	11158	11765

C Range: 0 - 360DEG
C Interval: 90.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:
Test Date:13 March 2024

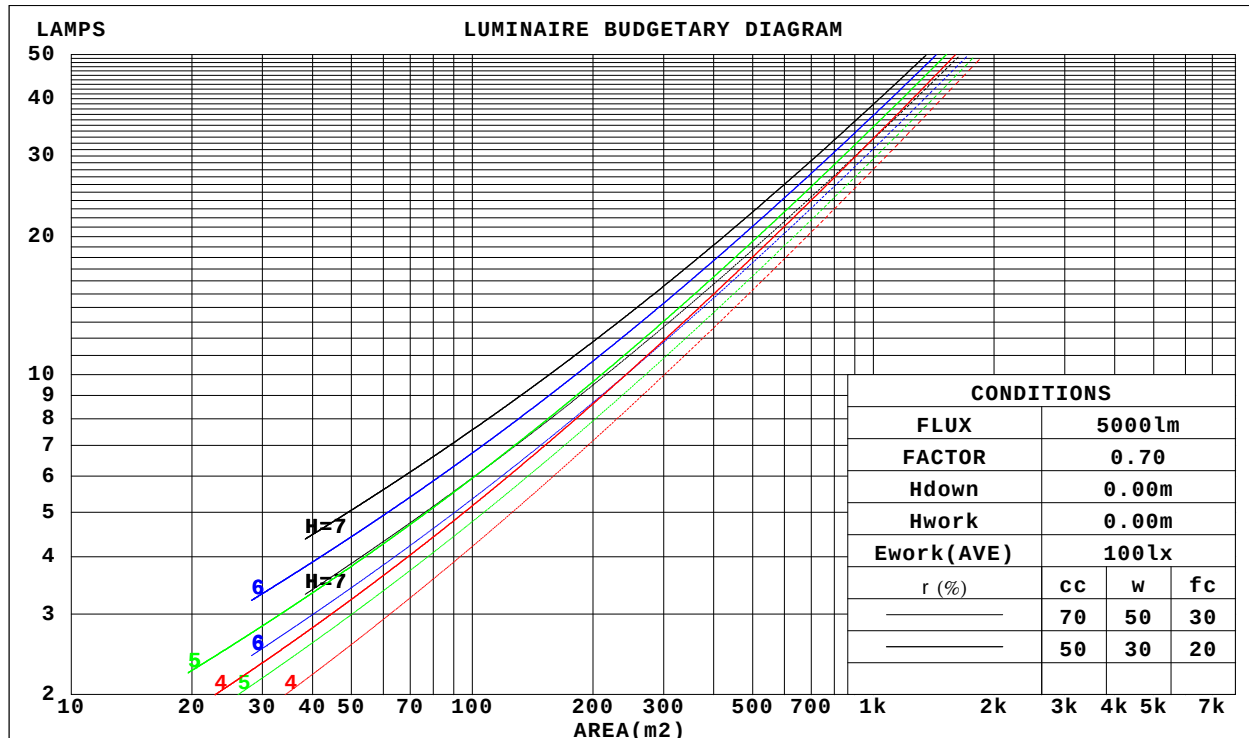
g Range: 0 - 90DEG
g Interval: 1.0DEG
Test System:EVERFINE G0-2000B_V1 SYSTEM V2.0.400
Humidity:65.0%
Test Distance:8.300m [K=1.0723]
Remarks:

EVERFINE GONIOPHOTOMETERS SYSTEM TEST REPORT

CU AND LUMINAIRE BUDGETARY ESTIMATE DIAGRAM

Test:U:120.34V I:0.2156A P:25.568W PF:0.9853 Freq:59.98Hz Lamp Flux:3636.76x1 lm		
NAME:	TYPE:	WEIGHT:
SPEC.:100-277v	DIM.:	SERIAL No.:
MFR.:	SUR.:	Shielding Angle:

r cc	80%			70%			50%			30%			10%			0
r w	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	0
r fc	20%			20%			20%			20%			20%			0
RCR	RCR:Room Cavity Ratio			Coefficients of Utilization(CU)												
0.0	1.19	1.19	1.19	1.16	1.16	1.16	1.11	1.11	1.11	1.06	1.06	1.06	1.02	1.02	1.02	.00
1.0	1.03	.98	.94	1.00	.96	.93	.96	.93	.90	.92	.89	.87	.89	.86	.84	.82
2.0	.89	.82	.76	.87	.80	.75	.83	.78	.73	.80	.75	.71	.77	.73	.70	.67
3.0	.78	.69	.62	.76	.68	.62	.73	.66	.61	.70	.64	.60	.68	.63	.59	.56
4.0	.69	.59	.52	.67	.59	.52	.65	.57	.51	.62	.56	.51	.60	.55	.50	.48
5.0	.61	.52	.45	.60	.51	.45	.58	.50	.44	.56	.49	.44	.54	.48	.43	.41
6.0	.55	.46	.39	.54	.45	.39	.52	.44	.38	.50	.43	.38	.49	.43	.38	.36
7.0	.50	.41	.34	.49	.40	.34	.47	.40	.34	.46	.39	.34	.44	.38	.33	.31
8.0	.45	.36	.31	.44	.36	.30	.43	.36	.30	.42	.35	.30	.41	.34	.30	.28
9.0	.41	.33	.27	.41	.33	.27	.40	.32	.27	.39	.32	.27	.38	.31	.27	.25
10.0	.38	.30	.25	.38	.30	.25	.37	.29	.25	.36	.29	.24	.35	.29	.24	.23



C Range: 0 - 360DEG
 C Interval: 90.0DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:
 Test Date:13 March 2024

g Range: 0 - 90DEG
 g Interval: 1.0DEG
 Test System:EVERFINE GO-2000B_V1 SYSTEM V2.0.400
 Humidity:65.0%
 Test Distance:8.300m [K=1.0723]
 Remarks:

EVERFINE GONIOPHOTOMETERS SYSTEM TEST REPORT

WEC AND CCEC

Test:U:120.34V I:0.2156A P:25.568W PF:0.9853 Freq:59.98Hz Lamp Flux:3636.76x1 lm					
NAME:			TYPE:		WEIGHT:
SPEC.:100-277v			DIM.:		SERIAL No.:
MFR.:			SUR.:		Shielding Angle:

r CC	80%			70%			50%			30%			10%			0	
r W	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	0	
r fc	20%			20%			20%			20%			20%			0	
RCR	RCR:Room Cavity Ratio						Wall Exitance Coefficients(WEC)										
0.0																	
1.0	.331	.188	.060	.323	.185	.059	.310	.178	.057	.298	.172	.055	.286	.166	.054		
2.0	.306	.168	.051	.300	.165	.051	.288	.160	.050	.277	.155	.049	.267	.151	.048		
3.0	.281	.149	.045	.275	.147	.044	.265	.143	.044	.255	.140	.043	.246	.136	.042		
4.0	.257	.134	.039	.252	.132	.039	.243	.129	.039	.234	.126	.038	.226	.123	.037		
5.0	.237	.121	.035	.232	.119	.035	.224	.117	.034	.217	.114	.034	.209	.112	.034		
6.0	.219	.110	.031	.215	.109	.031	.208	.106	.031	.201	.104	.031	.194	.102	.030		
7.0	.203	.100	.028	.200	.099	.028	.193	.098	.028	.187	.096	.028	.181	.094	.028		
8.0	.189	.092	.026	.186	.092	.026	.180	.090	.026	.175	.089	.026	.170	.087	.025		
9.0	.177	.086	.024	.174	.085	.024	.169	.084	.024	.164	.082	.024	.159	.081	.023		
10.0	.166	.080	.022	.164	.079	.022	.159	.078	.022	.155	.077	.022	.150	.076	.022		

r c c	80%			70%			50%			30%			10%			0
r w	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	0
r f c	20%			20%			20%			20%			20%			0
R C R	R C R:Room Cavity Ratio						Ceiling Cavity Exitance Coefficients(C C E C)									
0.0	.190	.190	.190	.163	.163	.163	.111	.111	.111	.064	.064	.064	.020	.020	.020	
1.0	.182	.156	.133	.156	.134	.114	.106	.092	.079	.061	.053	.046	.020	.017	.015	
2.0	.174	.132	.096	.149	.113	.083	.102	.079	.058	.059	.046	.034	.019	.015	.011	
3.0	.167	.114	.073	.143	.099	.063	.098	.069	.044	.057	.040	.026	.018	.013	.009	
4.0	.159	.101	.057	.136	.087	.050	.094	.061	.035	.054	.036	.021	.017	.012	.007	
5.0	.151	.091	.046	.130	.079	.040	.090	.055	.028	.052	.032	.017	.017	.011	.006	
6.0	.144	.083	.038	.124	.071	.033	.085	.050	.024	.050	.029	.014	.016	.010	.005	
7.0	.137	.076	.033	.118	.066	.028	.081	.046	.020	.047	.027	.012	.015	.009	.004	
8.0	.130	.070	.028	.112	.061	.025	.078	.043	.017	.045	.025	.010	.015	.008	.003	
9.0	.124	.065	.025	.107	.056	.022	.074	.040	.015	.043	.023	.009	.014	.008	.003	
10.0	.118	.061	.022	.102	.053	.019	.071	.037	.014	.041	.022	.008	.013	.007	.003	

C Range: 0 - 360DEG
C Interval: 90.0DEG
Test Speed: HIGH
Temperature: 25.3DEG
Operators:
Test Date: 13 March 2024

g Range: 0 - 90DEG
g Interval: 1.0DEG
Test System: EVERFINE GO-2000B_V1 SYSTEM V2.0.400
Humidity: 65.0%
Test Distance: 8.300m [K=1.0723]
Remarks:

EVERFINE GONIOPHOTOMETERS SYSTEM TEST REPORT

UGR(Unified Glare Rating) Table

Test:U:120.34V I:0.2156A P:25.568W PF:0.9853 Freq:59.98Hz Lamp Flux:3636.76x1 lm											
NAME:					TYPE:			WEIGHT:			
SPEC.:100-277v					DIM.:			SERIAL No.:			
MFR.:					SUR.:			Shielding Angle:			
ceiling/cavity	0.7	0.7	0.5	0.5	0.3	0.7	0.7	0.5	0.5	0.3	
walls	0.5	0.3	0.5	0.3	0.3	0.5	0.3	0.5	0.3	0.3	
working plane	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	
Room dimensions		Viewed crosswise					Viewed endwise				
x = 2H y = 2H	2H	21.1	22.7	21.4	22.9	23.1	21.4	23.0	21.7	23.2	23.4
	3H	22.7	24.1	23.0	24.4	24.6	23.1	24.6	23.4	24.8	25.1
	4H	23.3	24.7	23.6	25.0	25.2	23.9	25.3	24.2	25.5	25.8
	6H	23.8	25.1	24.1	25.4	25.7	24.5	25.8	24.8	26.0	26.3
	8H	24.0	25.2	24.3	25.5	25.8	24.7	26.0	25.0	26.2	26.5
	12H	24.0	25.3	24.4	25.6	25.9	24.9	26.1	25.2	26.4	26.7
4H	2H	21.8	23.2	22.1	23.4	23.7	22.0	23.4	22.4	23.7	23.9
	3H	23.6	24.8	23.9	25.1	25.4	23.9	25.2	24.3	25.5	25.8
	4H	24.3	25.5	24.7	25.8	26.1	24.8	25.9	25.2	26.2	26.6
	6H	24.9	25.9	25.3	26.3	26.7	25.5	26.5	25.9	26.9	27.3
	8H	25.2	26.1	25.6	26.5	26.8	25.8	26.8	26.2	27.1	27.5
	12H	25.3	26.2	25.7	26.5	27.0	26.1	26.9	26.5	27.3	27.7
8H	4H	24.7	25.6	25.1	26.0	26.4	25.1	26.0	25.5	26.4	26.8
	6H	25.5	26.2	25.9	26.6	27.1	26.0	26.8	26.4	27.2	27.6
	8H	25.8	26.5	26.2	26.9	27.3	26.4	27.1	26.9	27.5	28.0
	12H	26.0	26.6	26.5	27.0	27.5	26.7	27.3	27.2	27.8	28.3
12H	4H	24.7	25.6	25.1	26.0	26.4	25.1	26.0	25.5	26.3	26.8
	6H	25.5	26.2	26.0	26.7	27.1	26.1	26.7	26.5	27.2	27.6
	8H	25.9	26.5	26.4	27.0	27.4	26.5	27.1	27.0	27.6	28.0
Variations with the observer position at spacings:											
S = 1.0H		+ 0.1 / - 0.2					+ 0.1 / - 0.2				
1.5H		+ 0.2 / - 0.3					+ 0.2 / - 0.3				
2.0H		+ 0.1 / - 0.4					+ 0.1 / - 0.3				

CIE Pub.117, 3637 lm Total Lamp Luminous Flux Corrected ($8\log(F/F_0) = 4.5$)

C Range: 0 - 360DEG
C Interval: 90.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:
Test Date:13 March 2024

g Range: 0 - 90DEG
g Interval: 1.0DEG
Test System:EVERFINE GO-2000B_V1 SYSTEM V2.0.400
Humidity:65.0%
Test Distance:8.300m [K=1.0723]
Remarks:

EVERFINE GONIOPHOTOMETERS SYSTEM TEST REPORT

UTILIZATION FACTORS TABLE

Test:U:120.34V I:0.2156A P:25.568W PF:0.9853 Freq:59.98Hz Lamp Flux:3636.76x1 lm		
NAME:	TYPE:	WEIGHT:
SPEC.:100-277v	DIM.:	SERIAL No.:
MFR.:	SUR.:	Shielding Angle:

REFLECTANCE										
Ceiling	0.8	0.8	0.8	0.7	0.7	0.7	0.5	0.5	0.5	0
Walls	0.7	0.5	0.3	0.7	0.5	0.3	0.7	0.5	0.3	0
Working plane	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0
ROOM INDEX	UTILIZATION FACTORS(PERCENT) $k(RI) \times RCR = 5$									
k = 0.60	56	44	37	55	44	37	54	43	37	30
0.80	66	54	46	65	53	46	63	53	46	39
1.00	74	63	55	73	62	55	71	64	54	47
1.25	81	70	63	80	70	63	77	68	62	54
1.50	86	76	69	85	75	68	82	73	67	59
2.00	94	85	78	92	83	77	88	81	75	67
2.50	98	89	83	96	88	82	92	85	80	72
3.00	101	94	88	99	92	87	95	89	85	76
4.00	105	99	94	103	97	93	99	94	90	81
5.00	108	103	98	105	101	97	101	97	94	84
ROOM INDEX	UF(total)									Direct
According to DIN EN 13032-2 2004			Suspended					SHRNOM = 1.25		

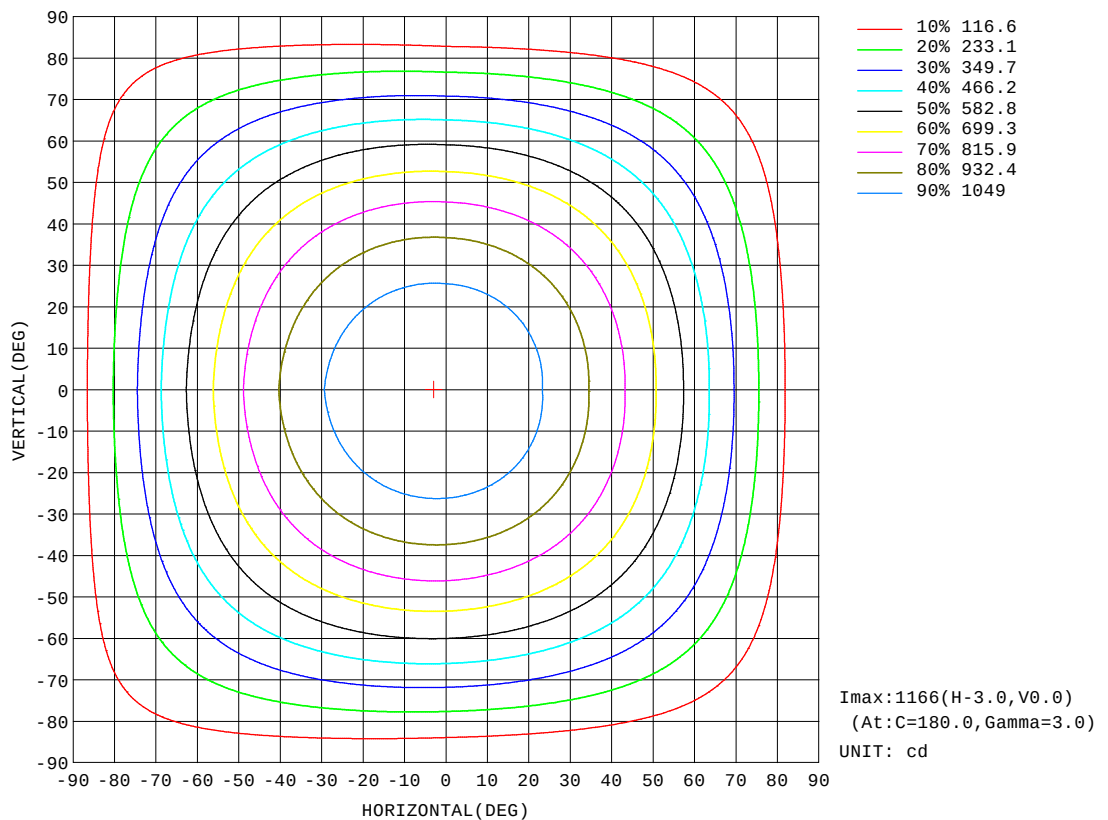
C Range: 0 - 360DEG
 C Interval: 90.0DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:
 Test Date:13 March 2024

g Range: 0 - 90DEG
 g Interval: 1.0DEG
 Test System:EVERFINE G0-2000B_V1 SYSTEM V2.0.400
 Humidity:65.0%
 Test Distance:8.300m [K=1.0723]
 Remarks:

EVERFINE GONIOPHOTOMETERS SYSTEM TEST REPORT

ISOCANDELA DIAGRAM

Test:U:120.34V I:0.2156A P:25.568W PF:0.9853 Freq:59.98Hz Lamp Flux:3636.76x1 lm		
NAME:	TYPE:	WEIGHT:
SPEC.:100-277v	DIM.:	SERIAL No.:
MFR.:	SUR.:	Shielding Angle:



C Range: 0 - 360DEG
C Interval: 90.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:
Test Date:13 March 2024

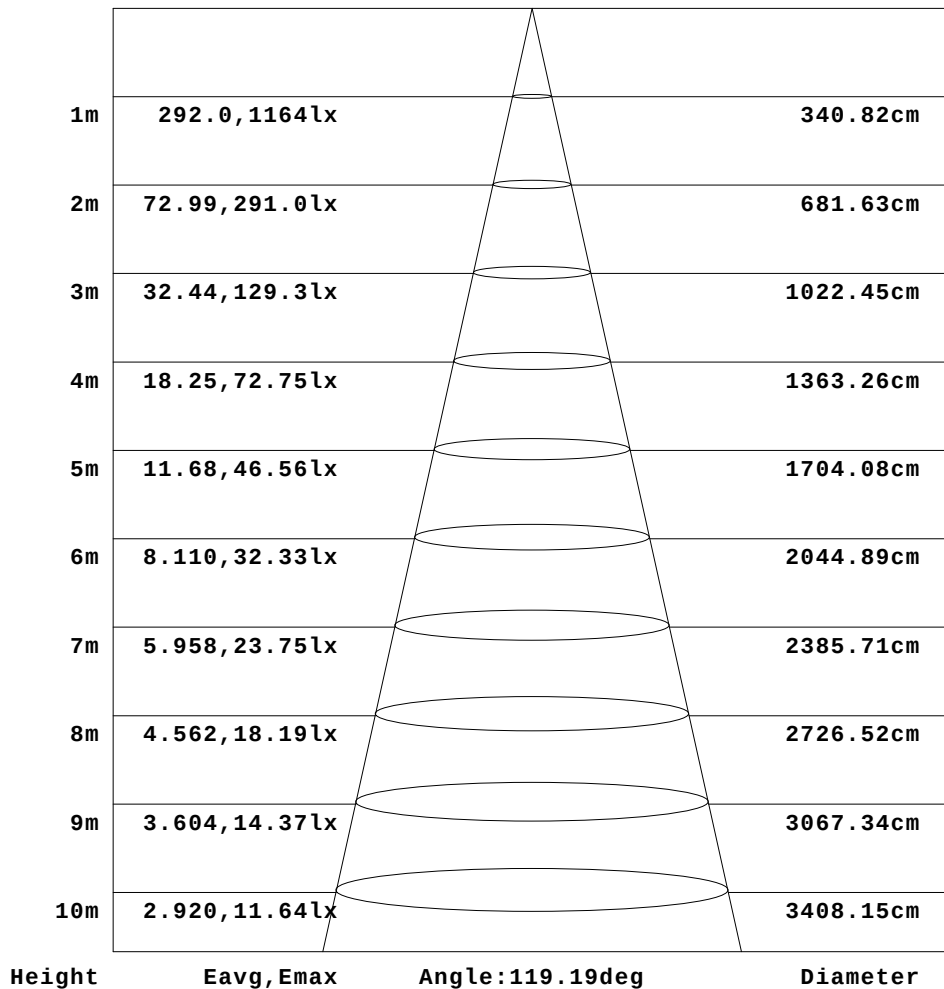
g Range: 0 - 90DEG
g Interval: 1.0DEG
Test System:EVERFINE G0-2000B_V1 SYSTEM V2.0.400
Humidity:65.0%
Test Distance:8.300m [K=1.0723]
Remarks:

EVERFINE GONIOPHOTOMETERS SYSTEM TEST REPORT

AAI Figure

Test:U:120.34V I:0.2156A P:25.568W PF:0.9853 Freq:59.98Hz Lamp Flux:3636.76x1 lm		
NAME:	TYPE:	WEIGHT:
SPEC.:100-277v	DIM.:	SERIAL No.:
MFR.:	SUR.:	Shielding Angle:

Flux out:2752 lm



Note:The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

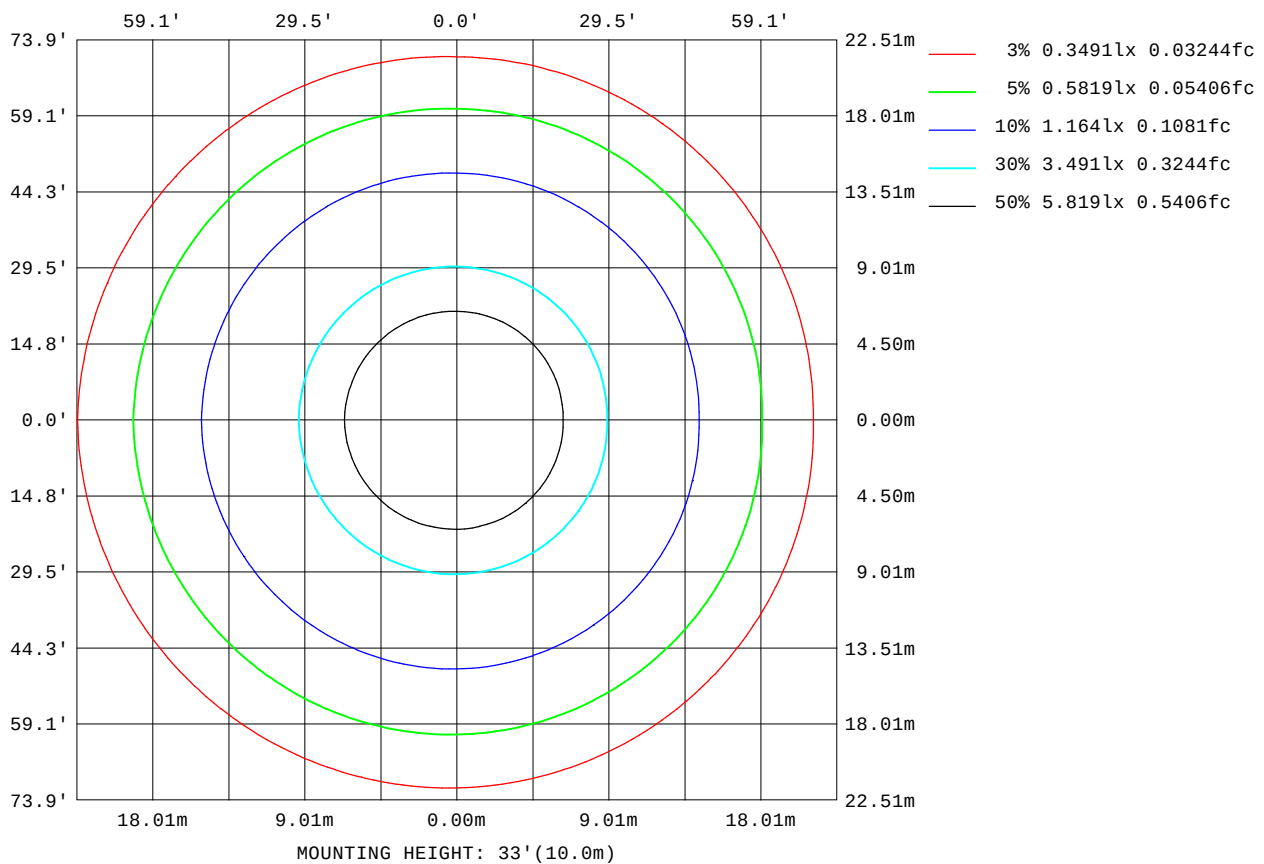
C Range: 0 - 360DEG
C Interval: 90.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:
Test Date:13 March 2024

g Range: 0 - 90DEG
g Interval: 1.0DEG
Test System:EVERFINE GO-2000B_V1 SYSTEM V2.0.400
Humidity:65.0%
Test Distance:8.300m [K=1.0723]
Remarks:

EVERFINE GONIOPHOTOMETERS SYSTEM TEST REPORT

ISOLUX DIAGRAM

Test:U:120.34V I:0.2156A P:25.568W PF:0.9853 Freq:59.98Hz Lamp Flux:3636.76x1 lm		
NAME:	TYPE:	WEIGHT:
SPEC.:100-277v	DIM.:	SERIAL No.:
MFR.:	SUR.:	Shielding Angle:



C Range: 0 - 360DEG
C Interval: 90.0DEG
Test Speed: HIGH
Temperature: 25.3DEG
Operators:
Test Date: 13 March 2024

g Range: 0 - 90DEG
g Interval: 1.0DEG
Test System: EVERFINE G0-2000B_V1 SYSTEM V2.0.400
Humidity: 65.0%
Test Distance: 8.300m [K=1.0723]
Remarks:

EVERFINE GONIOPHOTOMETERS SYSTEM TEST REPORT

LED Avg.L Report

Test:U:120.34V I:0.2156A P:25.568W PF:0.9853 Freq:59.98Hz Lamp Flux:3636.76x1 lm		
NAME:	TYPE:	WEIGHT:
SPEC.:100-277v	DIM.:	SERIAL No.:
MFR.:	SUR.:	Shielding Angle:

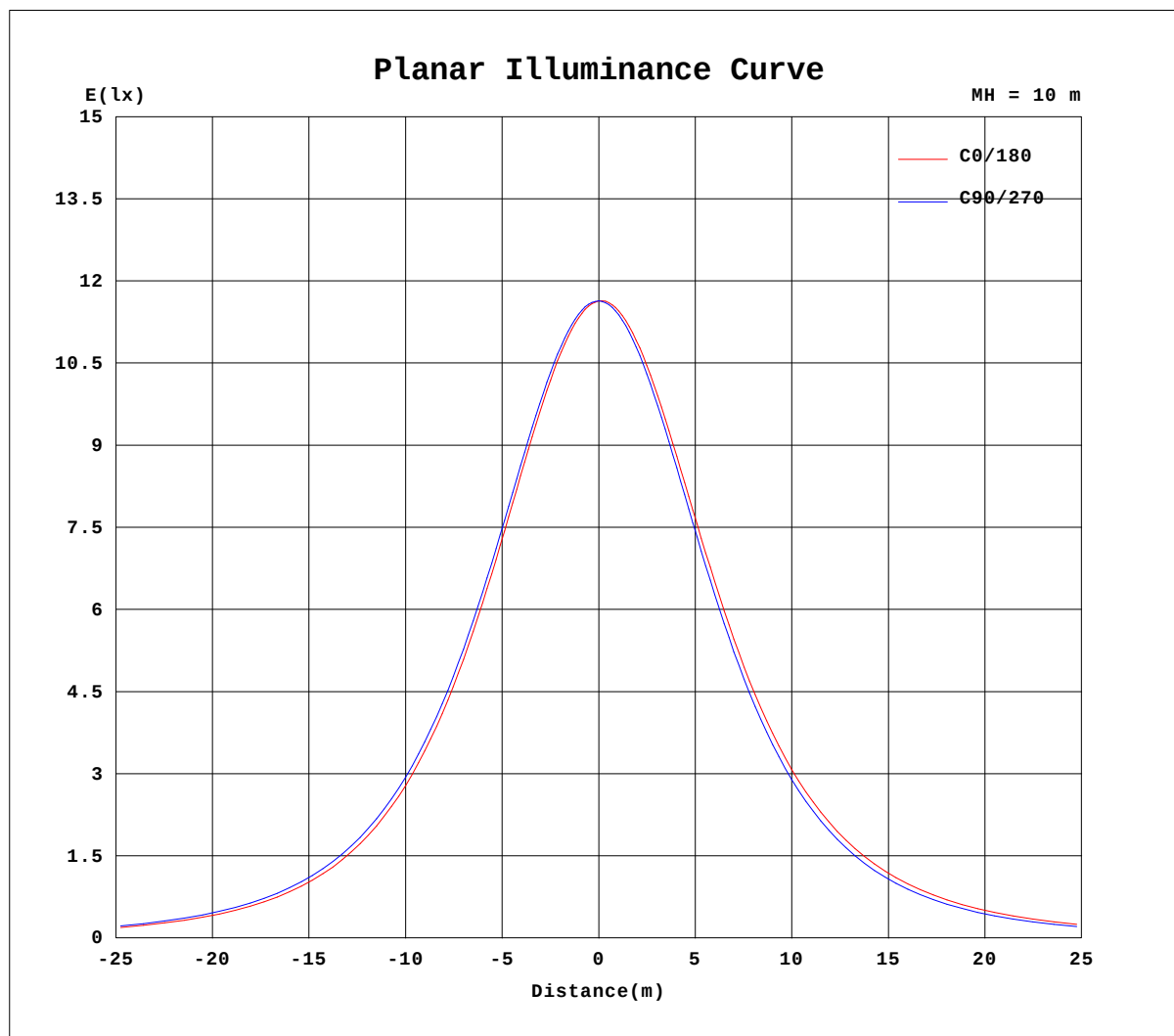
AvgL	cd/m2
L_0~180(65)av	11558
L_0~180(75)av	11232
L_0~180(85)av	12033
L_90~270(65)av	11300
L_90~270(75)av	10613
L_90~270(85)av	10247
L_45(65)av	11471
L_45(75)av	10961
L_45(85)av	11200

Standard: GB/T 29293-2012

C Range: 0 - 360DEG
C Interval: 90.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:
Test Date:13 March 2024

g Range: 0 - 90DEG
g Interval: 1.0DEG
Test System:EVERFINE G0-2000B_V1 SYSTEM V2.0.400
Humidity:65.0%
Test Distance:8.300m [K=1.0723]
Remarks:

Planar Illuminance Curve



C Range: 0 - 360DEG
C Interval: 90.0DEG
Test Speed: HIGH
Temperature: 25.3DEG
Operators:
Test Date: 13 March 2024

g Range: 0 - 90DEG
g Interval: 1.0DEG
Test System: EVERFINE G0-2000B_V1 SYSTEM V2.0.400
Humidity: 65.0%
Test Distance: 8.300m [K=1.0723]
Remarks:

UNIT: cd

```

Range: 0 - 90DEG
Interval: 1.0DEG
Test System:EVERFINE GO-2000B_V1 SYSTEM V2.0.400
Humidity:65.0%
Test Distance:8.300m [K=1.0723]
Remarks:

```

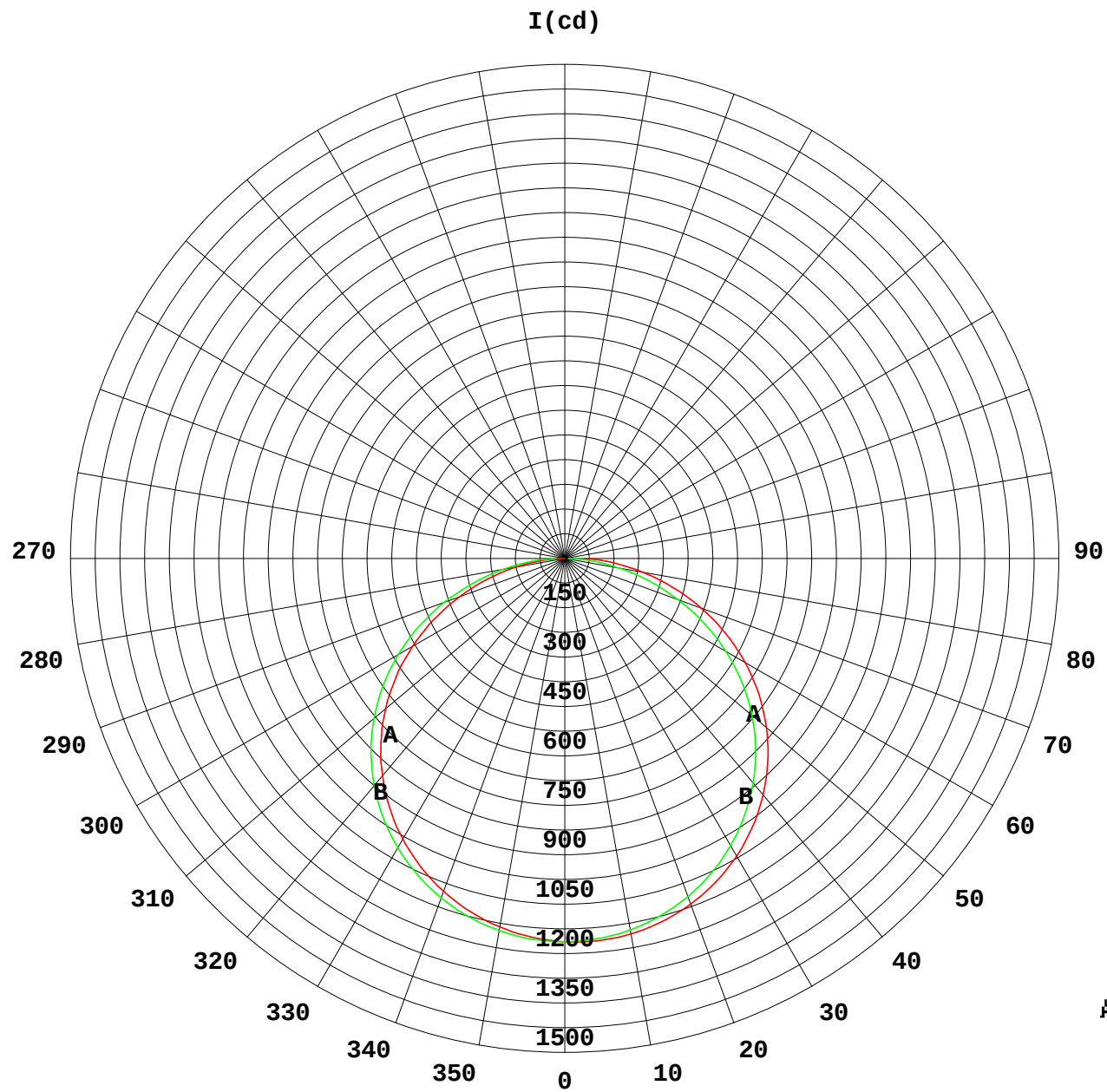
EVERFINE GONIOPHOTOMETERS SYSTEM TEST REPORT

Photometric Data Table [cd]

G/C	0.0	90.0	180.0	270.0
0.0	1164	1164	1164	1164
3.0	1159	1163	1166	1162
6.0	1151	1158	1164	1157
9.0	1140	1151	1160	1149
12.0	1127	1140	1152	1137
15.0	1110	1127	1142	1123
18.0	1090	1110	1128	1106
21.0	1068	1090	1111	1085
24.0	1043	1068	1092	1062
27.0	1015	1042	1069	1036
30.0	983.8	1014	1044	1007
33.0	950.8	983.4	1015	974.7
36.0	913.8	949.7	983.6	939.9
39.0	874.7	912.9	948.6	902.5
42.0	834.2	873.9	911.7	862.4
45.0	789.0	831.9	871.7	819.3
48.0	743.0	787.4	828.9	773.7
51.0	694.5	740.5	783.9	725.8
54.0	641.2	690.8	735.7	674.5
57.0	589.2	638.2	684.9	620.5
60.0	534.9	584.1	632.0	565.0
63.0	475.9	527.2	576.6	506.6
66.0	417.5	468.4	519.2	446.8
69.0	359.9	408.9	461.0	386.3
72.0	301.2	346.4	400.9	324.6
75.0	242.6	285.7	338.8	263.7
78.0	186.0	226.8	279.1	204.5
81.0	131.5	169.5	219.7	147.4
84.0	81.11	116.0	162.7	95.40
87.0	35.81	67.85	109.1	49.14
90.0	0.4334	25.16	58.36	10.86

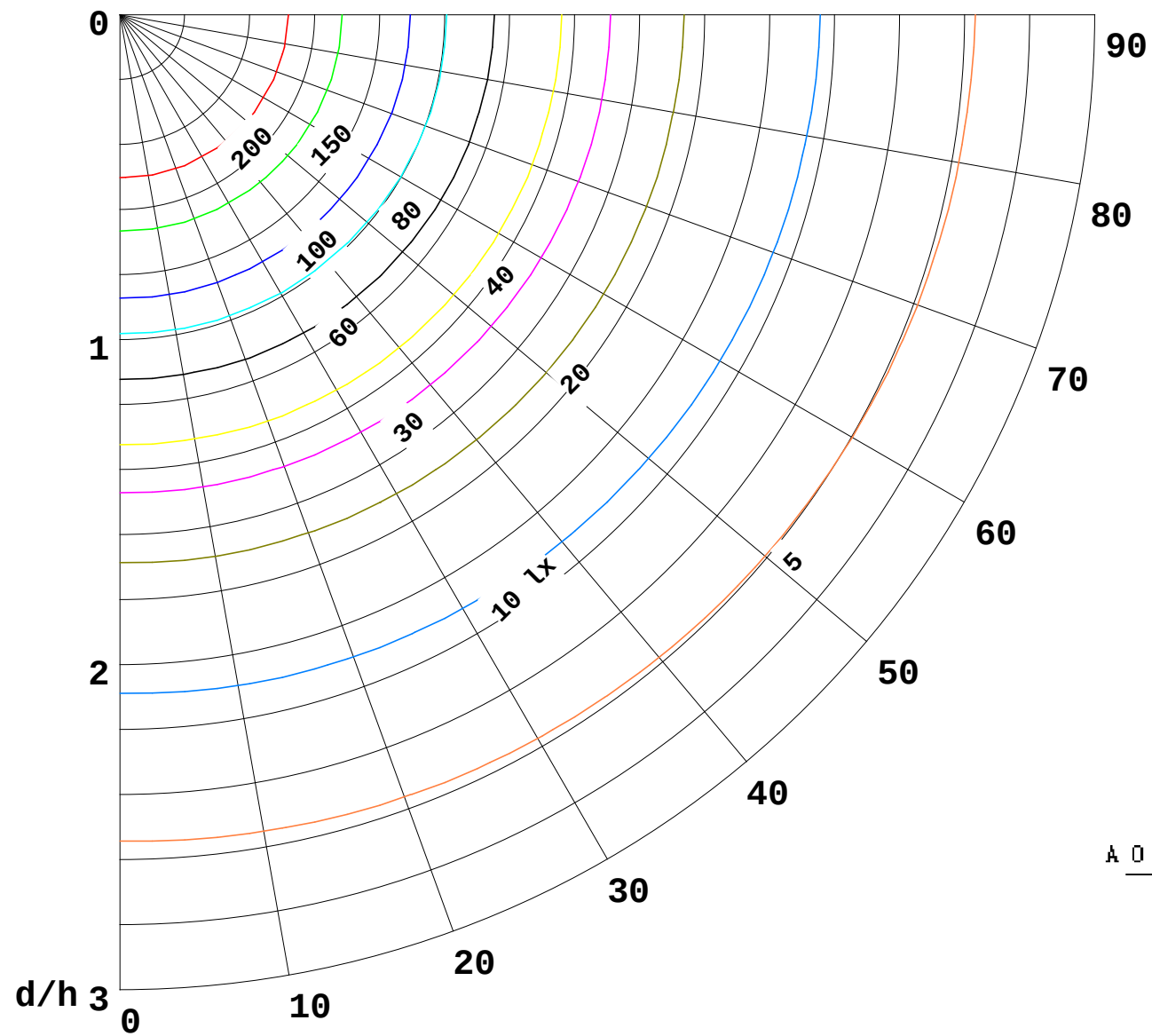
C Range: 0 - 360DEG
C Interval: 90.0DEG
Test Speed: HIGH
Temperature: 25.3DEG
Operators:
Test Date: 13 March 2024

g Range: 0 - 90DEG
g Interval: 1.0DEG
Test System: EVERFINE G0-2000B_V1 SYSTEM V2.0.400
Humidity: 65.0%
Test Distance: 8.300m [K=1.0723]
Remarks:



1000 lm

K = 1



F

=

5000 lm

K

=

0.7

Hcc

=

0.0 m

Hfc

=

0.0 m

Eave

=

100 lx

Pcc

70

Pw

50

Pfc

30

Pcc

50

Pw

30

Pfc

20

