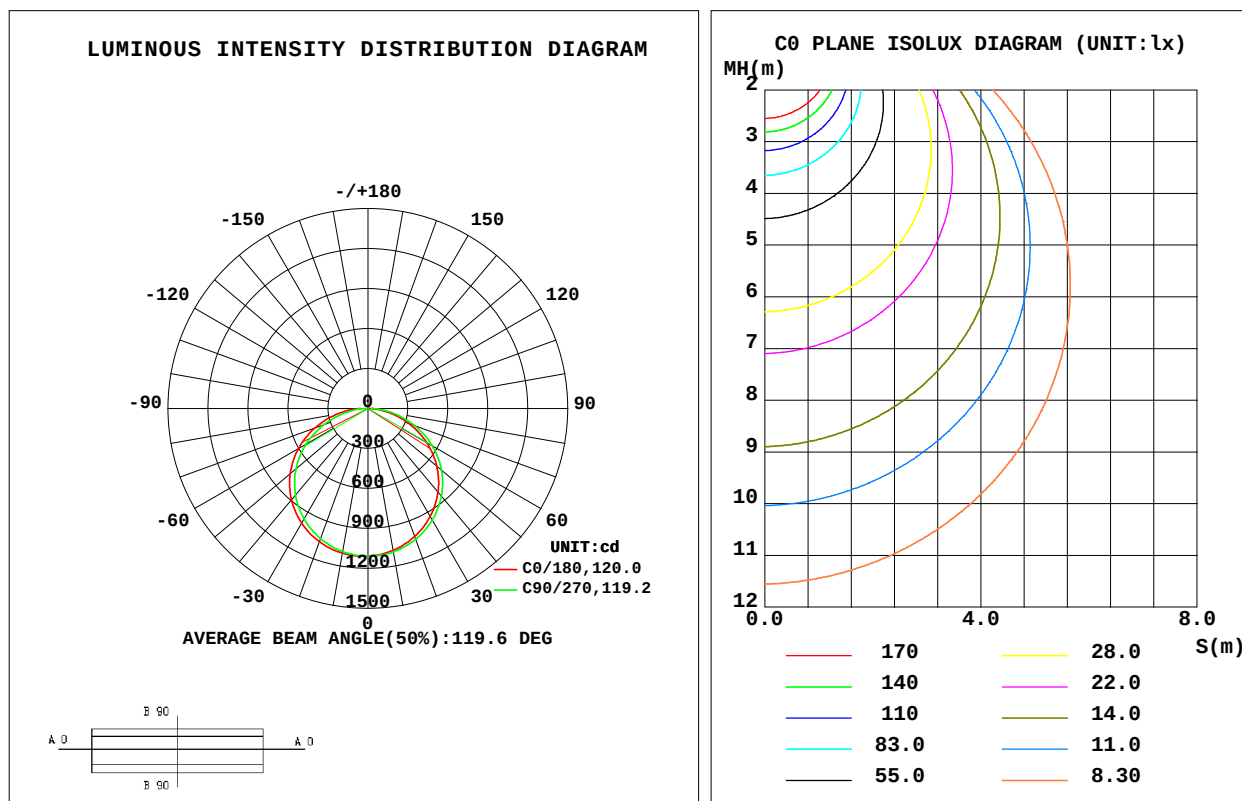


EVERFINE GONIOPHOTOMETERS SYSTEM TEST REPORT

LUMINAIRE PHOTOMETRIC TEST REPORT

Test:U:120.35V I:0.2162A P:25.643W PF:0.9854 Freq:59.98Hz Lamp Flux:3463.31x1 lm		
NAME:	TYPE:	WEIGHT:
SPEC.:100-277v	DIM.:	SERIAL No.:
MFR.:	SUR.:	Shielding Angle:

DATA OF LAMP		PHOTOMETRIC DATA Eff: 135.06 lm/W			
MODEL		I _{max} (cd)	1110	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)	3463.3	h UP, DN(C0-180)	0.0,48.5
NOMINAL FLUX(lm)	3463.31	CIE CLASS	DIRECT	h UP, DN(C180-360)	0.0,51.5
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	1081	1093	1103	1090					0- 10	105.0	105.0	3.03, 3.03
20	1023	1045	1065	1040					10- 20	302.6	407.6	11.8, 11.8
30	935.2	965.9	995.2	958.6					20- 30	464.5	872.2	25.2, 25.2
40	818.1	857.2	893.7	847.0					30- 40	571.1	1443	41.7, 41.7
50	675.1	720.4	763.3	706.8					40- 50	608.3	2052	59.2, 59.2
60	507.6	556.0	603.4	537.9					50- 60	568.9	2620	75.7, 75.7
70	322.8	368.8	421.4	348.2					60- 70	454.8	3075	88.8, 88.8
80	141.6	178.7	228.2	157.9					70- 80	284.8	3360	97, 97
90	0.2769	23.64	55.32	10.42					80- 90	103.2	3463	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		

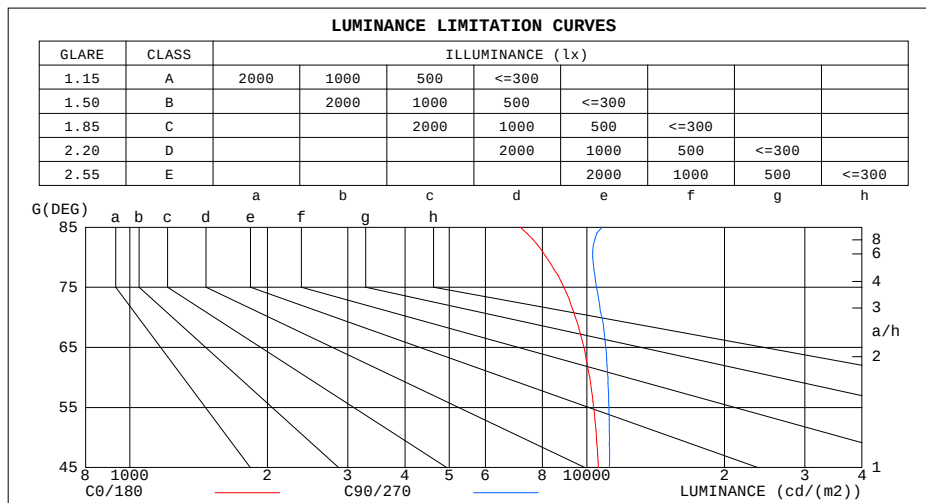
C Range: 0 - 360DEG
C Interval: 90.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:
Test Date:13 March 2024

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:120.35V I:0.2162A P:25.643W PF:0.9854 Freq:59.98Hz Lamp Flux:3463.31x1 lm		
NAME:	TYPE:	WEIGHT:
SPEC.:100-277v	DIM.:	SERIAL No.:
MFR.:	SUR.:	Shielding Angle:



LUMINANCE cd/(m2)		
G(DEG)	C0/180	C90/270
85	7147	10812
80	8153	10291
75	8901	10501
70	9438	10783
65	9853	10997
60	10153	11121
55	10354	11182
50	10502	11208
45	10601	11206

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

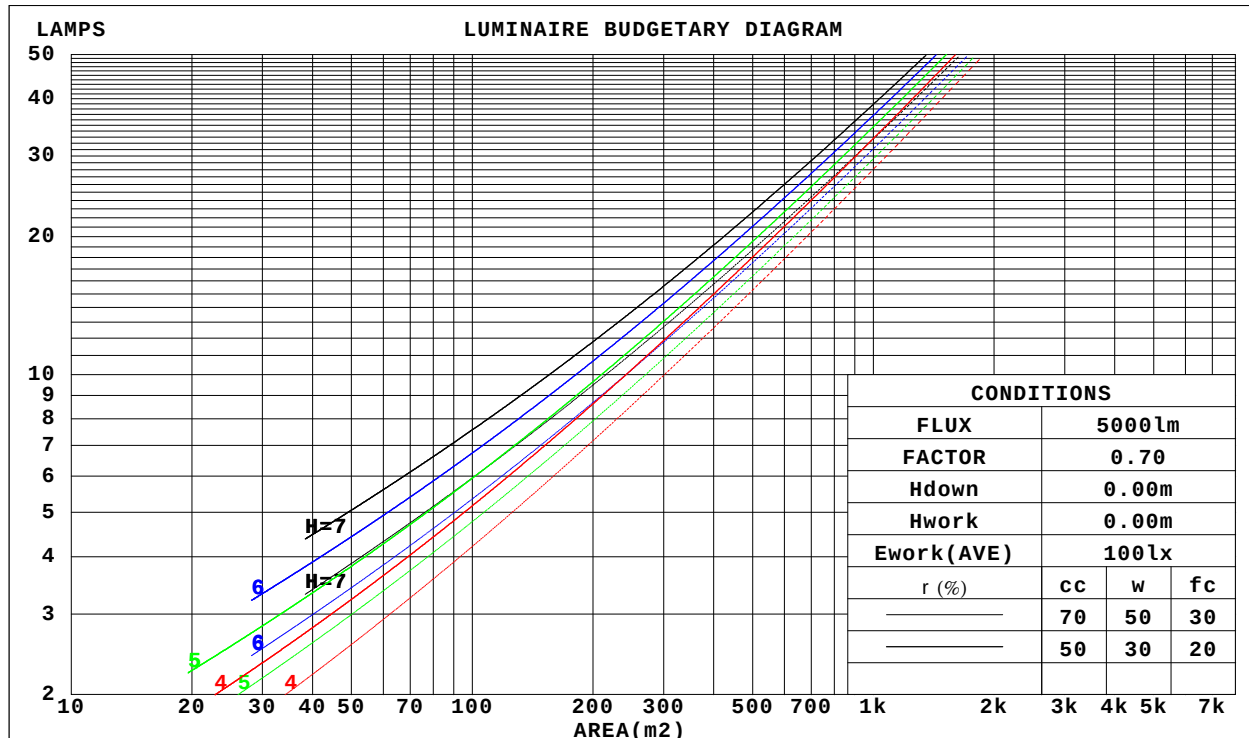
g Range: 0 - 90DEG
g Interval: 1.0DEG
Test System: EVERFINE G0-2000B_V1 SYSTEM V2.0.400
Humidity: 65.0%
Test Distance: 8.300m [K=1.0723]
Remarks:

EVERFINE GONIOPHOTOMETERS SYSTEM TEST REPORT

CU AND LUMINAIRE BUDGETARY ESTIMATE DIAGRAM

Test:U:120.35V I:0.2162A P:25.643W PF:0.9854 Freq:59.98Hz Lamp Flux:3463.31x1 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	.30	.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:120.35V I:0.2162A P:25.643W PF:0.9854 Freq:59.98Hz Lamp Flux:3463.31x1 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	.184	.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
RCR	RCR:Room Cavity Ratio Ceiling Cavity Exitance Coefficients(CCEC)															
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:120.35V I:0.2162A P:25.643W PF:0.9854 Freq:59.98Hz Lamp Flux:3463.31x1 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	20.9	22.5	21.2	22.7	22.9	21.2	22.8	21.5	23.0	23.2	
	3H	22.5	23.9	22.8	24.2	24.4	23.0	24.4	23.3	24.6	24.9
	4H	23.1	24.5	23.5	24.8	25.0	23.7	25.1	24.0	25.3	25.6
	6H	23.6	24.9	23.9	25.2	25.5	24.3	25.6	24.6	25.9	26.1
	8H	23.8	25.0	24.1	25.3	25.6	24.5	25.8	24.9	26.1	26.4
	12H	23.9	25.1	24.2	25.4	25.7	24.7	25.9	25.0	26.2	26.5
4H	2H	21.6	23.0	21.9	23.2	23.5	21.9	23.2	22.2	23.5	23.8
	3H	23.4	24.6	23.7	24.9	25.2	23.8	25.0	24.1	25.3	25.6
	4H	24.2	25.3	24.5	25.6	25.9	24.6	25.7	25.0	26.1	26.4
	6H	24.8	25.8	25.2	26.1	26.5	25.4	26.4	25.8	26.7	27.1
	8H	25.0	25.9	25.4	26.3	26.7	25.7	26.6	26.1	26.9	27.3
	12H	25.1	26.0	25.5	26.4	26.8	25.9	26.8	26.3	27.1	27.5
8H	4H	24.5	25.4	24.9	25.8	26.2	24.9	25.8	25.3	26.2	26.6
	6H	25.3	26.0	25.7	26.5	26.9	25.8	26.6	26.3	27.0	27.4
	8H	25.6	26.3	26.0	26.7	27.2	26.2	26.9	26.7	27.3	27.8
	12H	25.8	26.4	26.3	26.9	27.3	26.6	27.2	27.0	27.6	28.1
12H	4H	24.5	25.4	25.0	25.8	26.2	24.9	25.8	25.4	26.2	26.6
	6H	25.4	26.1	25.8	26.5	26.9	25.9	26.6	26.3	27.0	27.4
	8H	25.7	26.3	26.2	26.8	27.2	26.3	26.9	26.8	27.4	27.9
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, 3463 lm Total Lamp Luminous Flux Corrected ($8\log(F/F_0) = 4.3$)

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:120.35V I:0.2162A P:25.643W PF:0.9854 Freq:59.98Hz Lamp Flux:3463.31x1 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		

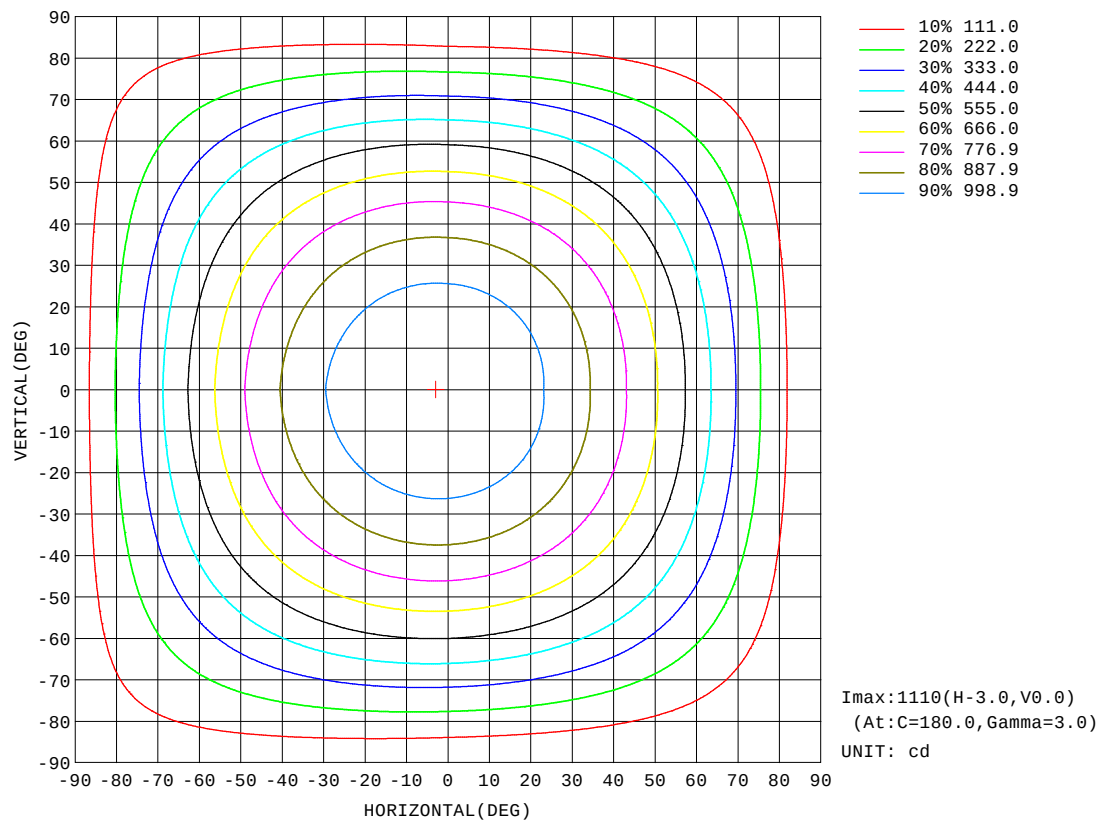
C Range: 0 - 360DEG
 C Interval: 90.0DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:
 Test Date:13 March 2024

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:120.35V I:0.2162A P:25.643W PF:0.9854 Freq:59.98Hz Lamp Flux:3463.31x1 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

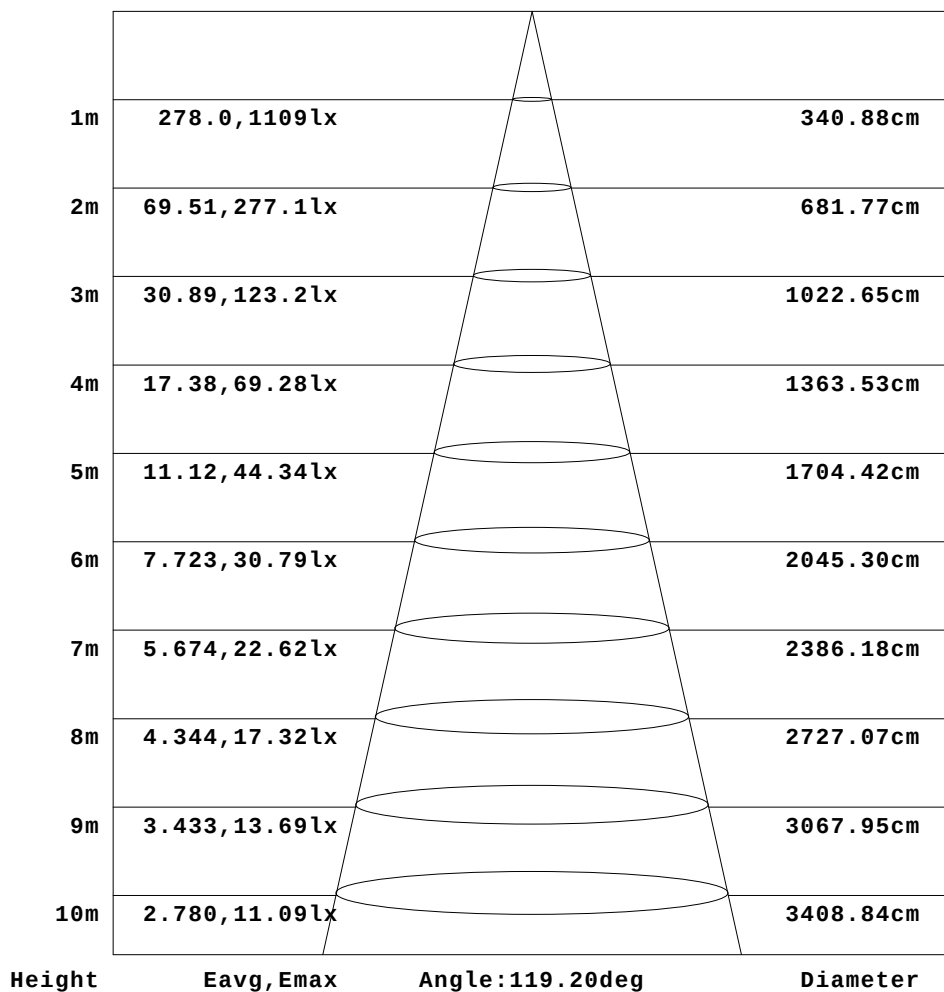
g Range: 0 - 90DEG
g Interval: 1.0DEG
Test System:EVERFINE G0-2000B_V1 SYSTEM V2.0.400
Humidity:65.0%
Test Distance:8.300m [K=1.0723]
Remarks:

EVERFINE GONIOPHOTOMETERS SYSTEM TEST REPORT

AAI Figure

Test:U:120.35V I:0.2162A P:25.643W PF:0.9854 Freq:59.98Hz Lamp Flux:3463.31x1 lm		
NAME:	TYPE:	WEIGHT:
SPEC.:100-277v	DIM.:	SERIAL No.:
MFR.:	SUR.:	Shielding Angle:

Flux out:2620 lm



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

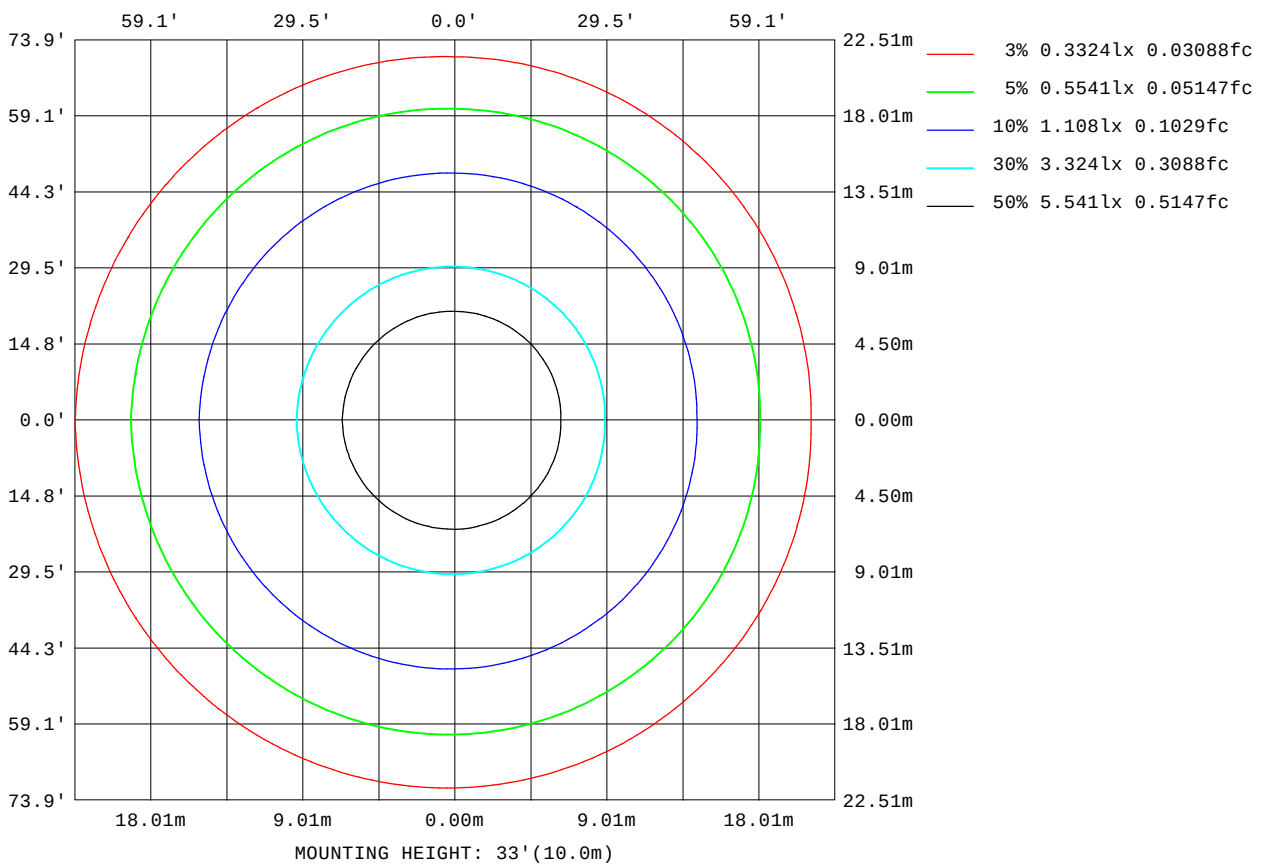
C Range: 0 - 360DEG
C Interval: 90.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:
Test Date:13 March 2024

g Range: 0 - 90DEG
g Interval: 1.0DEG
Test System:EVERFINE G0-2000B_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:120.35V I:0.2162A P:25.643W PF:0.9854 Freq:59.98Hz Lamp Flux:3463.31x1 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:120.35V I:0.2162A P:25.643W PF:0.9854 Freq:59.98Hz Lamp Flux:3463.31x1 lm		
NAME:	TYPE:	WEIGHT:
SPEC.:100-277v	DIM.:	SERIAL No.:
MFR.:	SUR.:	Shielding Angle:

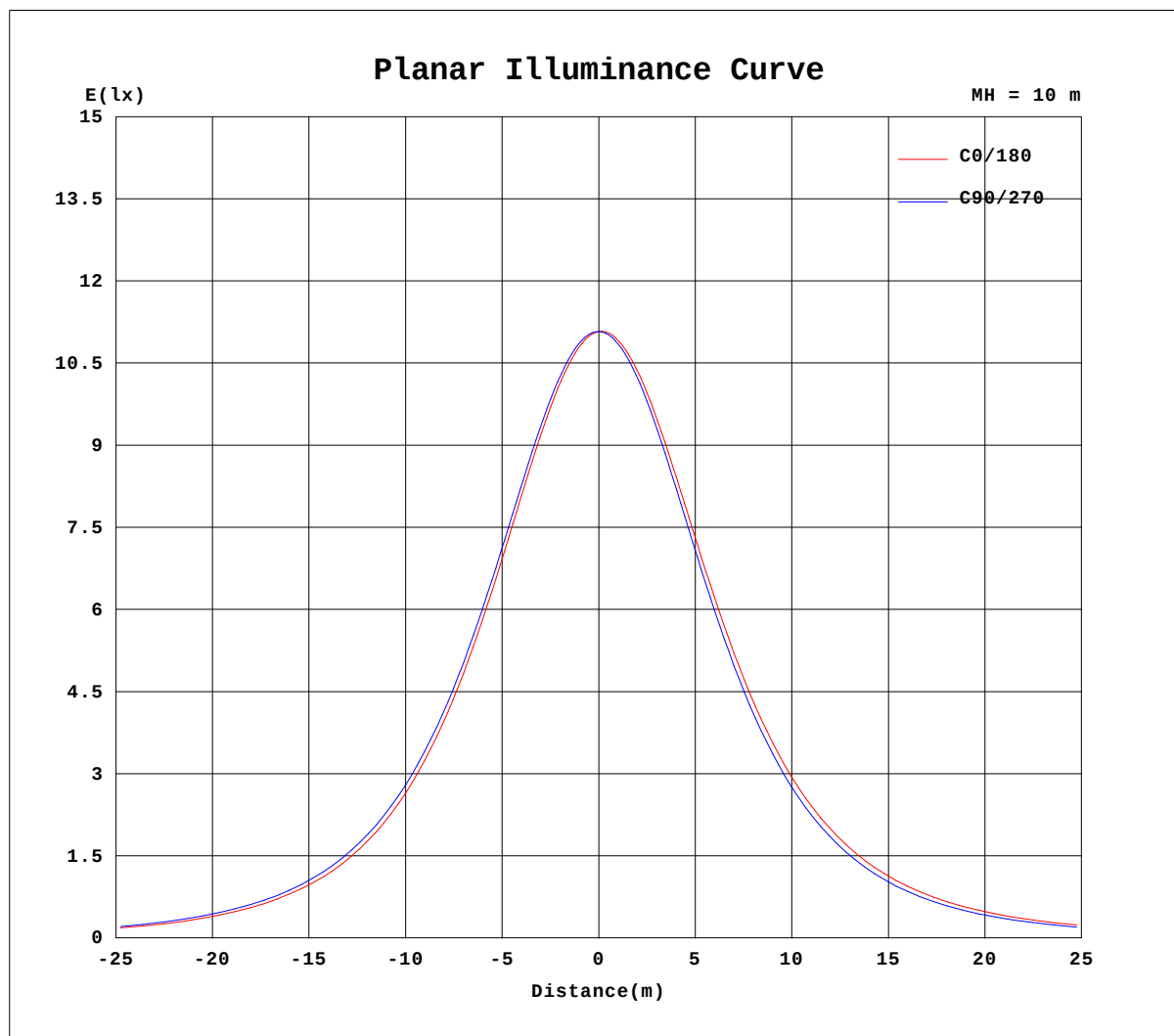
AvgL	cd/m2
L_0~180(65)av	11017
L_0~180(75)av	10702
L_0~180(85)av	11461
L_90~270(65)av	10758
L_90~270(75)av	10102
L_90~270(85)av	9746
L_45(65)av	10928
L_45(75)av	10439
L_45(85)av	10659

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:

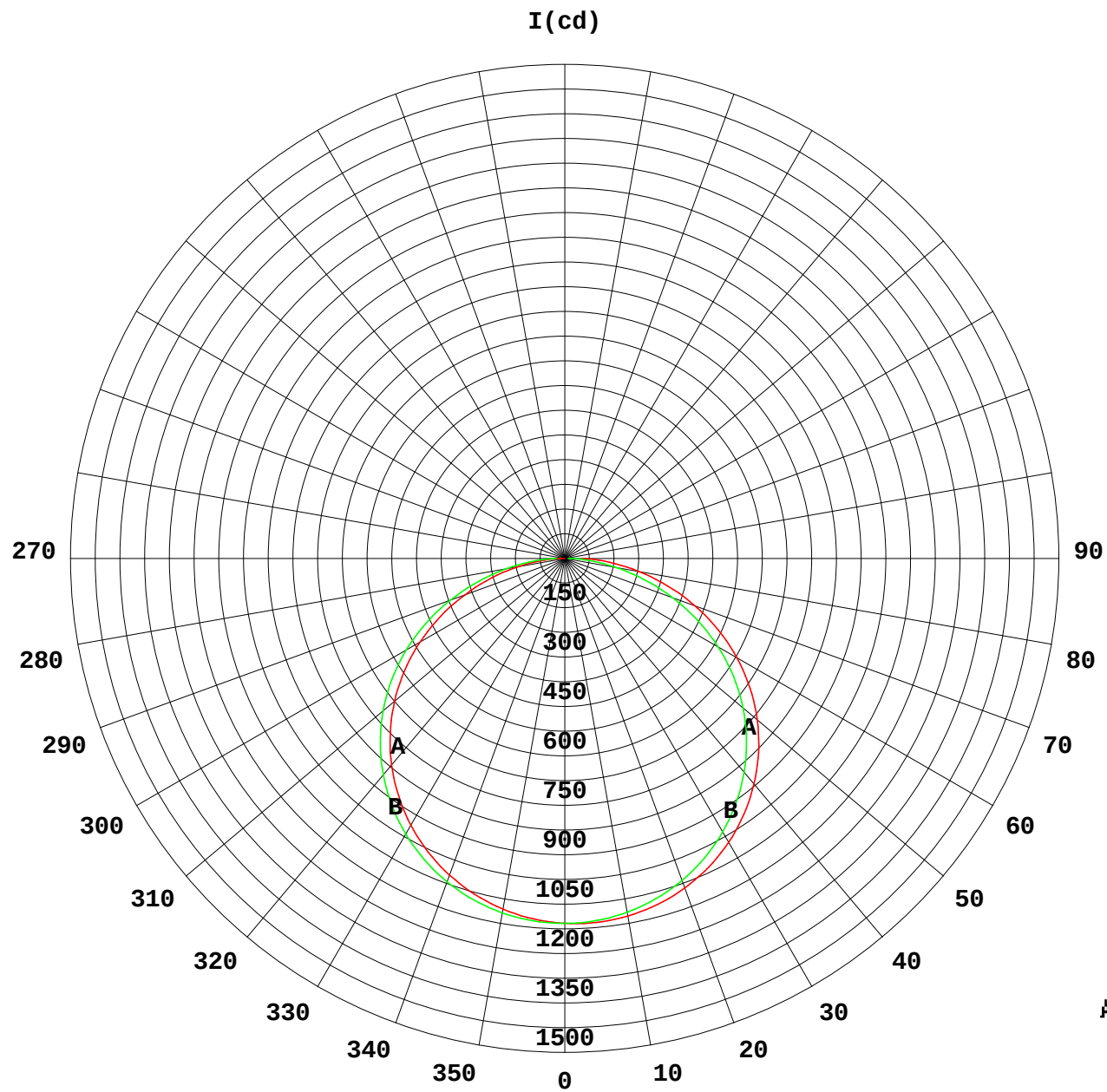
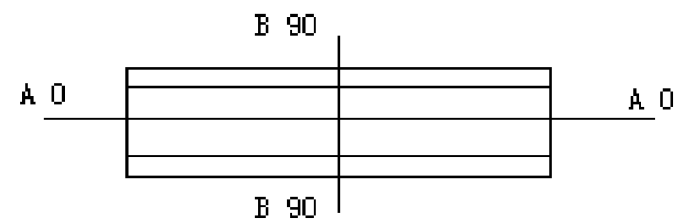
EVERFINE GONIOPHOTOMETERS SYSTEM TEST REPORT

Photometric Data Table [cd]

G/C	0.0	90.0	180.0	270.0
0.0	1108	1108	1108	1108
3.0	1103	1107	1110	1106
6.0	1096	1103	1109	1102
9.0	1085	1096	1105	1094
12.0	1072	1086	1098	1083
15.0	1056	1073	1088	1069
18.0	1037	1057	1075	1053
21.0	1016	1038	1059	1034
24.0	991.6	1017	1041	1012
27.0	964.5	992.9	1019	986.3
30.0	935.2	965.9	995.2	958.6
33.0	903.4	936.5	967.8	928.2
36.0	868.2	904.2	938.2	895.2
39.0	831.1	869.5	905.0	859.2
42.0	792.3	832.5	870.0	821.3
45.0	749.6	792.4	832.4	780.2
48.0	705.5	749.9	791.4	736.7
51.0	659.6	705.2	748.3	691.2
54.0	610.9	657.5	702.2	642.3
57.0	559.9	607.6	653.9	590.7
60.0	507.6	556.0	603.4	537.9
63.0	453.0	501.6	550.7	482.4
66.0	397.7	445.7	496.1	425.6
69.0	342.1	389.1	440.3	367.8
72.0	285.8	329.6	383.0	309.2
75.0	230.4	271.8	323.6	251.1
78.0	176.1	215.7	266.4	195.0
81.0	125.0	161.1	209.6	140.7
84.0	77.22	110.0	155.0	91.09
87.0	34.27	64.28	103.8	46.98
90.0	0.2769	23.64	55.32	10.42

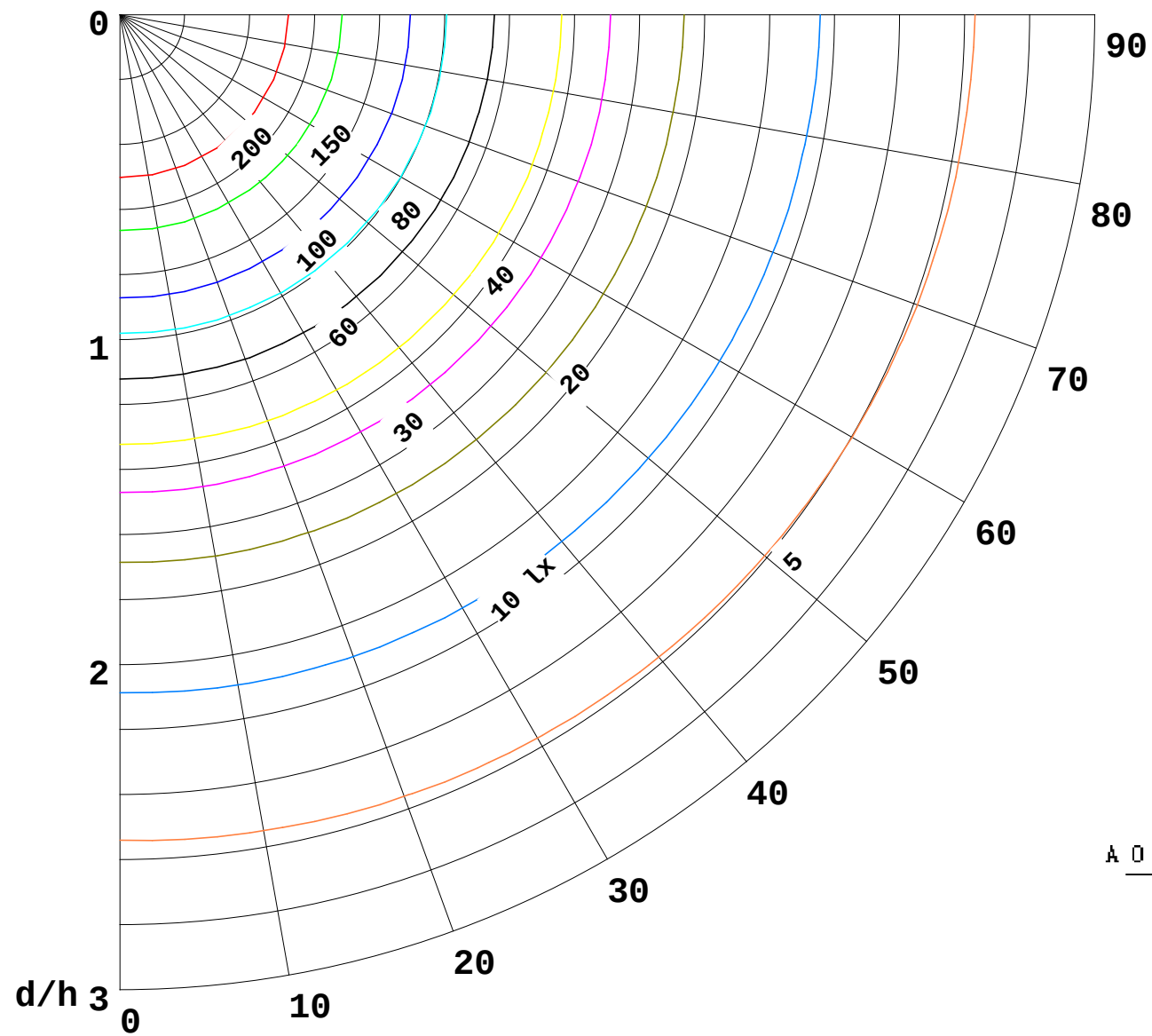
C Range: 0 - 360DEG
C Interval: 90.0DEG
Test Speed: HIGH
Temperature: 25.3DEG
Operators:
Test Date: 13 March 2024

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:



1000 lm

K = 1



F = 5000 lm

K = 0.7

Hcc = 0.0 m

Hfc = 0.0 m

Eave = 100 lx

Pcc

Pw

Pfc

70

50

30

50

30

20

