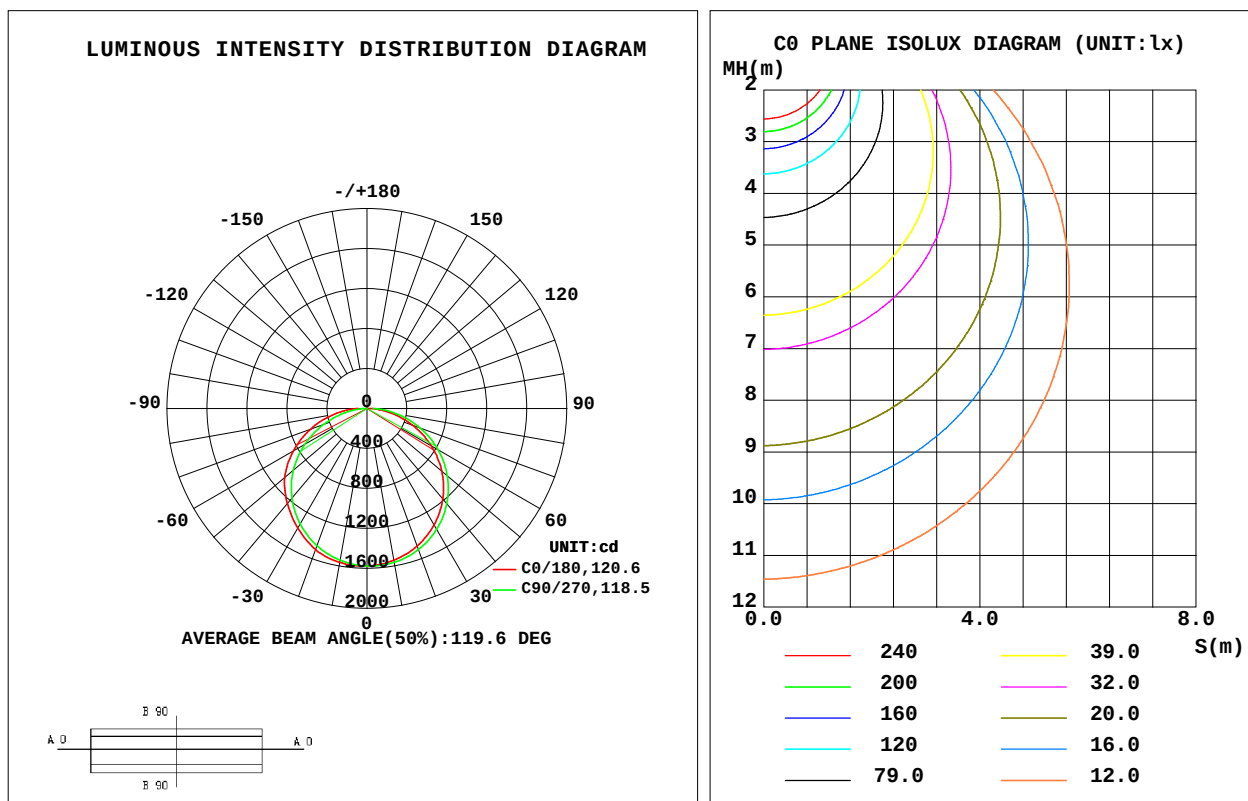


EVERFINE GONIOPHOTOMETERS SYSTEM TEST REPORT

LUMINAIRE PHOTOMETRIC TEST REPORT

Test:U:120.30V I:0.3302A P:39.569W PF:0.9960 Freq:59.98Hz Lamp Flux:4935.7x1 lm					
NAME:		TYPE:		WEIGHT:	
SPEC.:100-277v		DIM.:		SERIAL No.:	
MFR.:		SUR.:		Shielding Angle:	

DATA OF LAMP		PHOTOMETRIC DATA Eff: 124.74 lm/W			
MODEL		I _{max} (cd)	1578	S/MH(C0/180)	1.31
NOMINAL POWER(W)		LOR(%)	100.0	S/MH(C90/270)	1.26
RATED VOLTAGE(V)	120-277	TOTAL FLUX(lm)	4935.7	h UP, DN(C0-180)	0.0,50.0
NOMINAL FLUX(lm)	4935.7	CIE CLASS	DIRECT	h UP, DN(C180-360)	0.0,50.0
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: 2024-03-20

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=1.0964]
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	1543	1563	1564	1542					0- 10	149.4	149.4	3.03, 3.03
20	1465	1503	1504	1462					10- 20	430.5	579.8	11.7, 11.7
30	1344	1395	1384	1337					20- 30	659.1	1239	25.1, 25.1
40	1180	1243	1241	1169					30- 40	808.3	2047	41.5, 41.5
50	977.5	1051	1076	963.4					40- 50	862.1	2909	58.9, 58.9
60	743.5	821.2	852.7	719.2					50- 60	807.9	3717	75.3, 75.3
70	482.1	563.4	599.3	453.7					60- 70	648.8	4366	88.5, 88.5
80	221.6	297.0	332.0	195.2					70- 80	413.8	4780	96.8, 96.8
90	2.762	62.43	84.41	3.687					80- 90	155.8	4936	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		

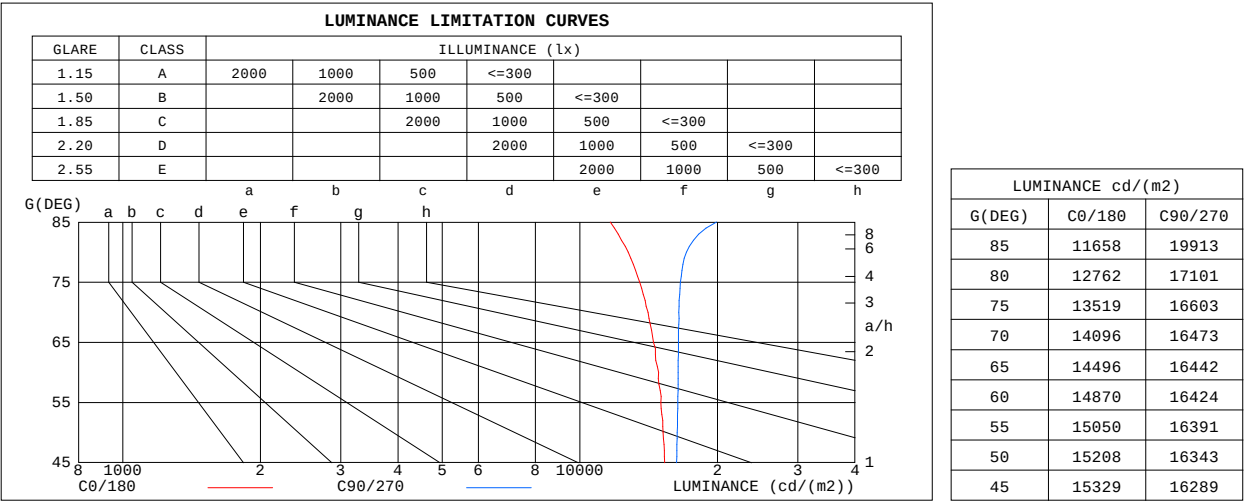
C Range: 0 - 360DEG
C Interval: 90.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:
Test Date:2024-03-20

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=1.0964]
Remarks:

EVERFINE GONIOPHOTOMETERS SYSTEM TEST REPORT

LUMINANCE LIMITATION CURVES

Test:U:120.30V I:0.3302A P:39.569W PF:0.9960 Freq:59.98Hz Lamp Flux:4935.7x1 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:2024-03-20

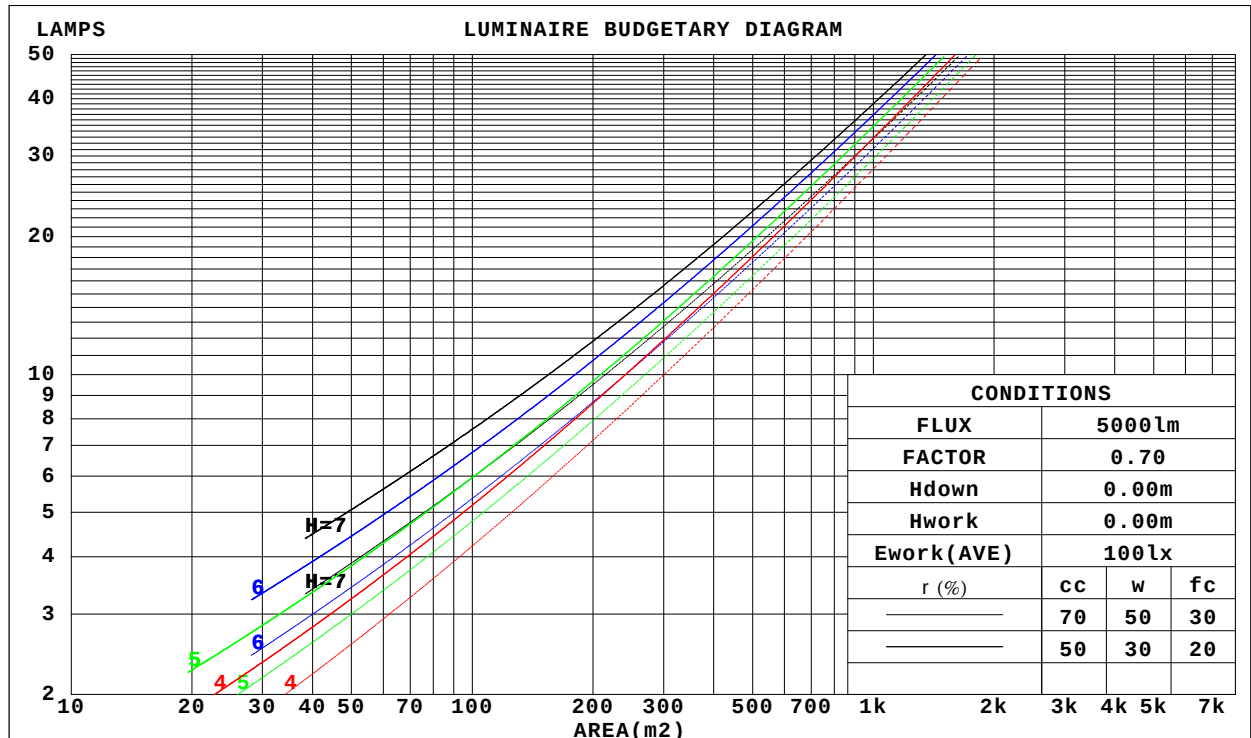
g Range: 0 - 90DEG
g Interval: 1.0DEG
Test System:EVERFINE G0-2000B_V1 SYSTEM V2.0.400
Humidity:65.0%
Test Distance:8.300m [K=1.0964]
Remarks:

EVERFINE GONIOPHOTOMETERS SYSTEM TEST REPORT

CU AND LUMINAIRE BUDGETARY ESTIMATE DIAGRAM

Test:U:120.30V I:0.3302A P:39.569W PF:0.9960 Freq:59.98Hz Lamp Flux:4935.7x1 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	1.00
1.0	1.03	.98	.94	1.00	.96	.92	.96	.93	.89	.92	.89	.87	.88	.86	.84	.82
2.0	.89	.82	.75	.87	.80	.75	.83	.78	.73	.80	.75	.71	.77	.73	.69	.67
3.0	.78	.69	.62	.76	.68	.62	.73	.66	.60	.70	.64	.59	.67	.63	.58	.56
4.0	.68	.59	.52	.67	.58	.52	.65	.57	.51	.62	.56	.50	.60	.54	.50	.47
5.0	.61	.52	.45	.60	.51	.44	.58	.50	.44	.56	.49	.43	.54	.48	.43	.41
6.0	.55	.45	.39	.54	.45	.39	.52	.44	.38	.50	.43	.38	.49	.42	.38	.35
7.0	.50	.40	.34	.49	.40	.34	.47	.39	.34	.46	.39	.34	.44	.38	.33	.31
8.0	.45	.36	.30	.44	.36	.30	.43	.35	.30	.42	.35	.30	.41	.34	.30	.28
9.0	.41	.33	.27	.41	.33	.27	.40	.32	.27	.38	.32	.27	.37	.31	.27	.25
10.0	.38	.30	.25	.38	.30	.25	.37	.29	.24	.36	.29	.24	.35	.29	.24	.22



C Range: 0 - 360DEG
C Interval: 90.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:
Test Date:2024-03-20

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=1.0964]
Remarks:

EVERFINE GONIOPHOTOMETERS SYSTEM TEST REPORT

WEC AND CCEC

Test:U:120.30V I:0.3302A P:39.569W PF:0.9960 Freq:59.98Hz Lamp Flux:4935.7x1 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	.333	.189	.060	.326	.186	.059	.313	.179	.057	.300	.173	.056	.289	.168	.054	
2.0	.308	.169	.052	.301	.166	.051	.289	.161	.050	.278	.156	.049	.268	.152	.048	
3.0	.282	.150	.045	.276	.148	.044	.266	.144	.044	.256	.140	.043	.247	.137	.042	
4.0	.258	.134	.039	.253	.132	.039	.244	.129	.039	.235	.126	.038	.227	.123	.038	
5.0	.237	.121	.035	.233	.120	.035	.225	.117	.034	.217	.115	.034	.210	.112	.034	
6.0	.219	.110	.031	.215	.109	.031	.208	.107	.031	.201	.105	.031	.195	.103	.030	
7.0	.203	.101	.029	.200	.100	.028	.193	.098	.028	.187	.096	.028	.181	.094	.028	
8.0	.190	.093	.026	.186	.092	.026	.181	.090	.026	.175	.089	.026	.170	.087	.025	
9.0	.177	.086	.024	.174	.085	.024	.169	.084	.024	.164	.082	.024	.160	.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	.082	.046	.020	.047	.027	.012	.015	.009	.004	
8.0	.131	.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:2024-03-20

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=1.0964]
 Remarks:

EVERFINE GONIOPHOTOMETERS SYSTEM TEST REPORT

UGR(Unified Glare Rating) Table

Test:U:120.30V I:0.3302A P:39.569W PF:0.9960 Freq:59.98Hz Lamp Flux:4935.7x1 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	22.3	23.9	22.6	24.1	24.3	22.7	24.2	22.9	24.5	24.7
	3H	23.9	25.4	24.3	25.6	25.9	24.5	25.9	24.8	26.2	26.4
	4H	24.6	26.0	25.0	26.3	26.5	25.3	26.7	25.6	26.9	27.2
	6H	25.2	26.5	25.5	26.7	27.0	26.0	27.3	26.3	27.6	27.9
	8H	25.3	26.6	25.7	26.9	27.2	26.3	27.6	26.6	27.8	28.1
	12H	25.5	26.7	25.8	27.0	27.3	26.5	27.8	26.9	28.1	28.4
4H	2H	23.0	24.4	23.3	24.7	24.9	23.3	24.7	23.6	24.9	25.2
	3H	24.9	26.1	25.2	26.4	26.7	25.3	26.5	25.7	26.8	27.1
	4H	25.7	26.8	26.1	27.1	27.5	26.3	27.4	26.6	27.7	28.0
	6H	26.4	27.4	26.8	27.7	28.1	27.1	28.1	27.5	28.5	28.8
	8H	26.6	27.5	27.0	27.9	28.3	27.5	28.4	27.9	28.8	29.2
	12H	26.8	27.6	27.2	28.0	28.4	27.8	28.7	28.2	29.1	29.5
8H	4H	26.1	27.0	26.5	27.4	27.8	26.6	27.5	27.0	27.9	28.3
	6H	26.9	27.7	27.4	28.1	28.5	27.6	28.4	28.0	28.8	29.2
	8H	27.3	28.0	27.7	28.4	28.9	28.1	28.8	28.5	29.2	29.7
	12H	27.6	28.2	28.0	28.6	29.1	28.6	29.2	29.0	29.6	30.1
12H	4H	26.1	27.0	26.5	27.4	27.8	26.6	27.4	27.0	27.8	28.2
	6H	27.0	27.7	27.5	28.2	28.6	27.7	28.4	28.1	28.8	29.3
	8H	27.5	28.1	27.9	28.5	29.0	28.2	28.8	28.7	29.3	29.7
Variations with the observer position at spacings:											
S = 1.0H		+ 0.1 / - 0.2					+ 0.1 / - 0.1				
1.5H		+ 0.2 / - 0.3					+ 0.2 / - 0.3				
2.0H		+ 0.1 / - 0.4					+ 0.1 / - 0.3				

CIE Pub.117, 4936 lm Total Lamp Luminous Flux Corrected ($8\log(F/F_0) = 5.5$)

C Range: 0 - 360DEG
C Interval: 90.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:
Test Date:2024-03-20

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=1.0964]
Remarks:

EVERFINE GONIOPHOTOMETERS SYSTEM TEST REPORT

UTILIZATION FACTORS TABLE

Test:U:120.30V I:0.3302A P:39.569W PF:0.9960 Freq:59.98Hz Lamp Flux:4935.7x1 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	36	30
0.80	66	54	46	65	53	46	63	52	46	38
1.00	74	63	55	73	62	55	71	63	54	47
1.25	81	70	63	80	70	62	77	68	62	54
1.50	86	76	69	85	75	68	82	73	67	59
2.00	93	84	77	91	83	77	88	81	75	67
2.50	97	89	83	95	88	82	91	85	80	71
3.00	101	94	88	99	92	87	95	89	84	76
4.00	105	99	94	103	97	93	98	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		

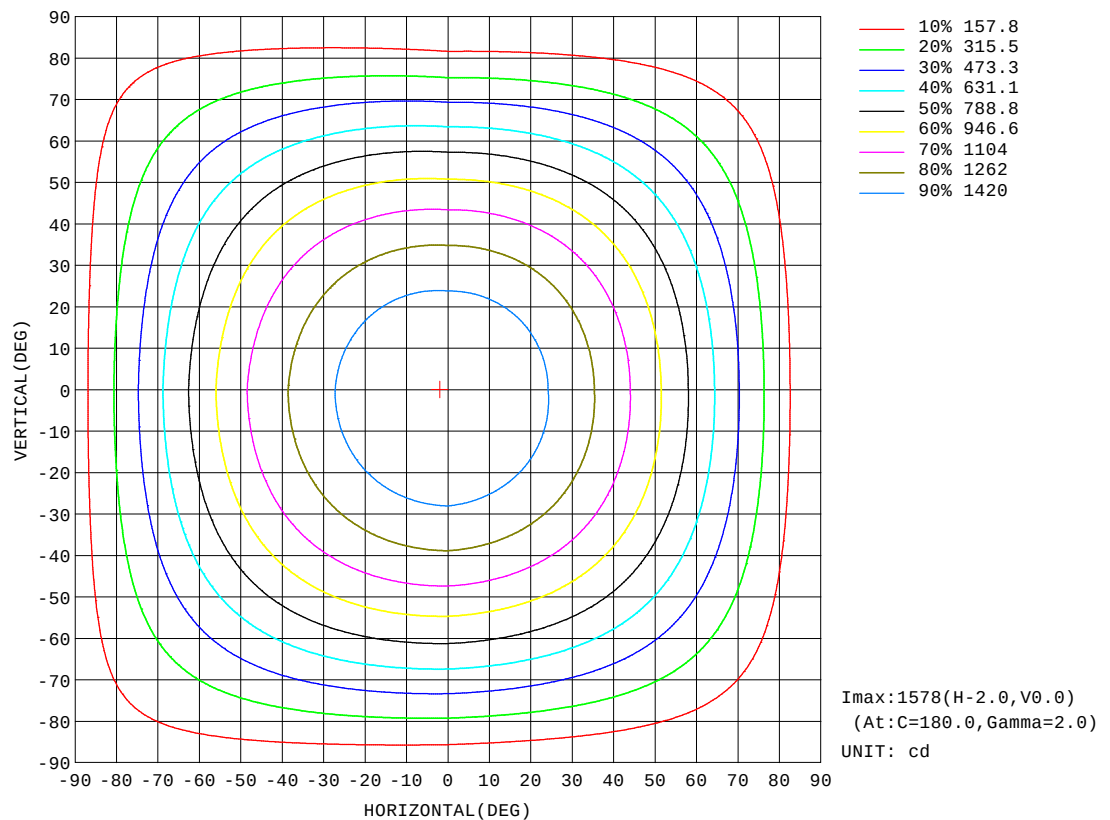
C Range: 0 - 360DEG
 C Interval: 90.0DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:
 Test Date:2024-03-20

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=1.0964]
 Remarks:

EVERFINE GONIOPHOTOMETERS SYSTEM TEST REPORT

ISOCANDELA DIAGRAM

Test:U:120.30V I:0.3302A P:39.569W PF:0.9960 Freq:59.98Hz Lamp Flux:4935.7x1 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:2024-03-20

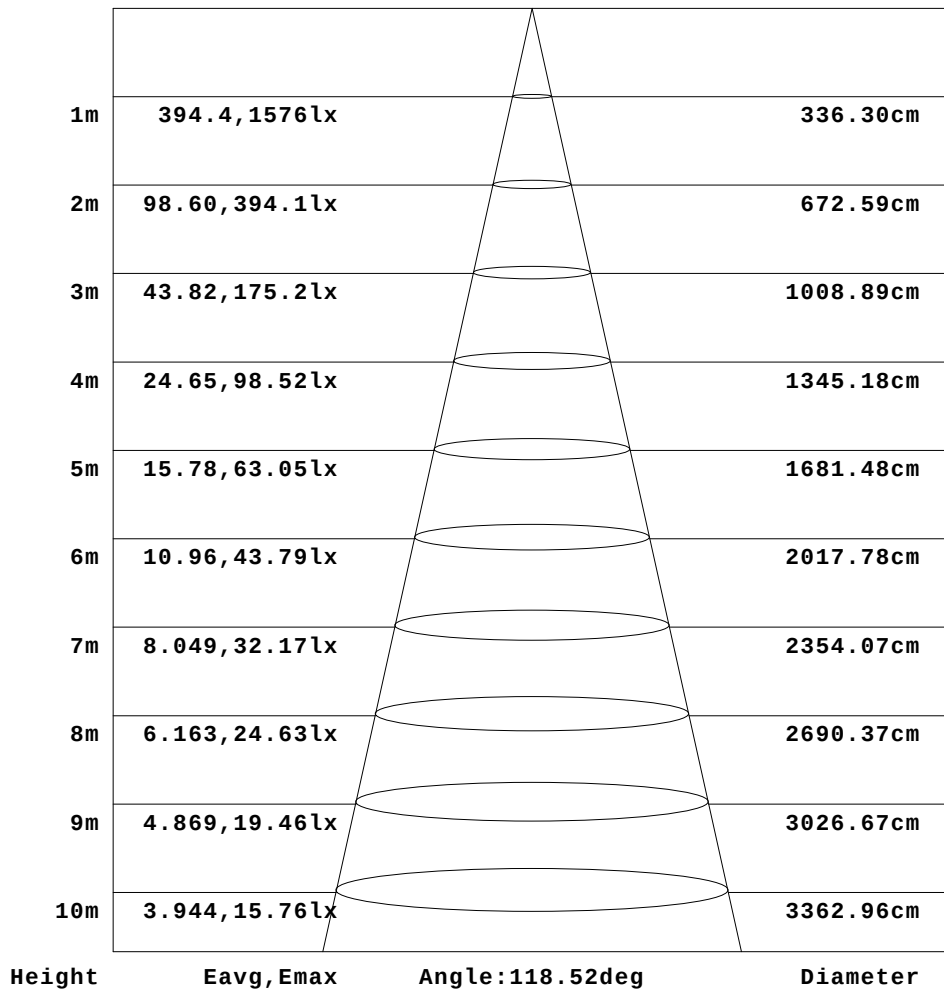
g Range: 0 - 90DEG
g Interval: 1.0DEG
Test System:EVERFINE G0-2000B_V1 SYSTEM V2.0.400
Humidity:65.0%
Test Distance:8.300m [K=1.0964]
Remarks:

EVERFINE GONIOPHOTOMETERS SYSTEM TEST REPORT

AAI Figure

Test:U:120.30V I:0.3302A P:39.569W PF:0.9960 Freq:59.98Hz Lamp Flux:4935.7x1 lm		
NAME:	TYPE:	WEIGHT:
SPEC.:100-277v	DIM.:	SERIAL No.:
MFR.:	SUR.:	Shielding Angle:

Flux out:3717 lm



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

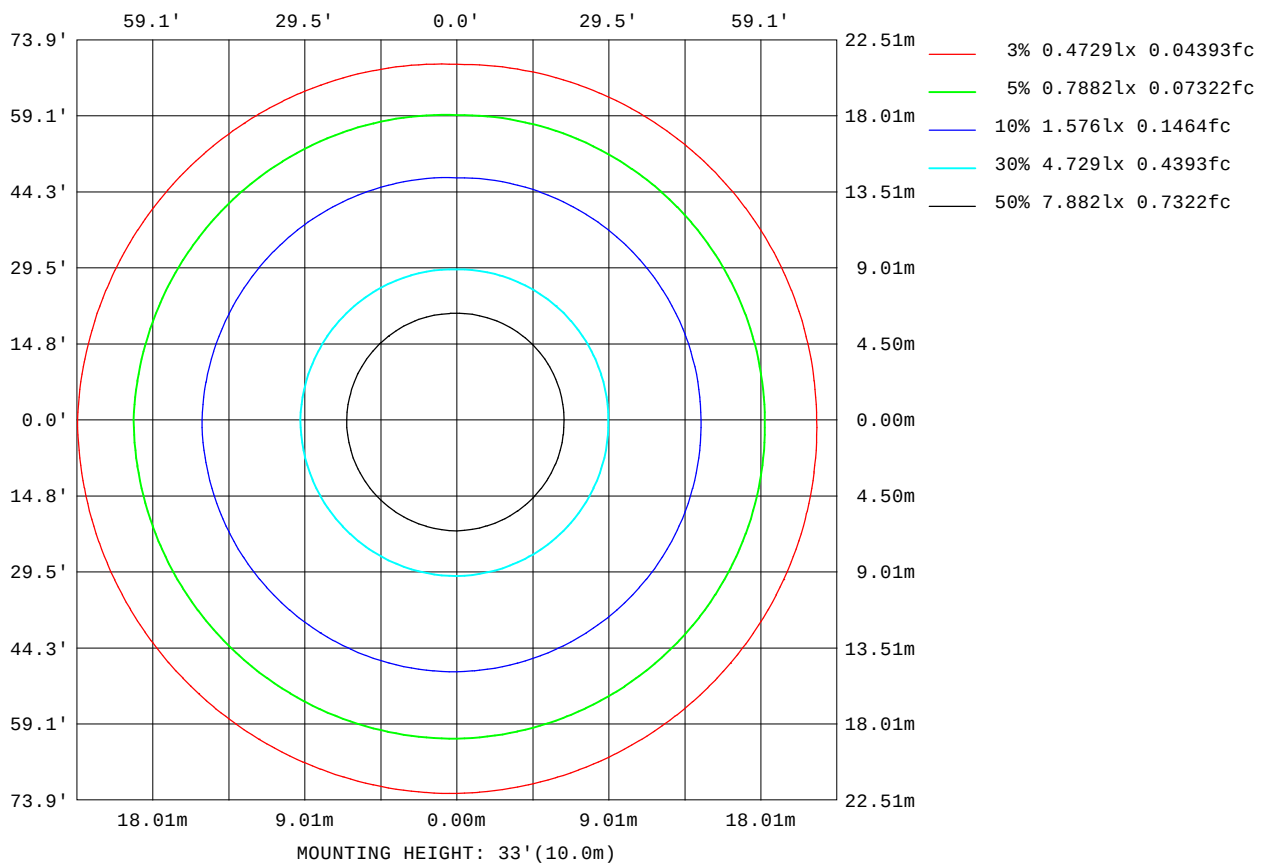
C Range: 0 - 360DEG
C Interval: 90.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:
Test Date:2024-03-20

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=1.0964]
Remarks:

EVERFINE GONIOPHOTOMETERS SYSTEM TEST REPORT

ISOLUX DIAGRAM

Test:U:120.30V I:0.3302A P:39.569W PF:0.9960 Freq:59.98Hz Lamp Flux:4935.7x1 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: 2024-03-20

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=1.0964]
Remarks:

EVERFINE GONIOPHOTOMETERS SYSTEM TEST REPORT

LED Avg.L Report

Test:U:120.30V I:0.3302A P:39.569W PF:0.9960 Freq:59.98Hz Lamp Flux:4935.7x1 lm		
NAME:	TYPE:	WEIGHT:
SPEC.:100-277v	DIM.:	SERIAL No.:
MFR.:	SUR.:	Shielding Angle:

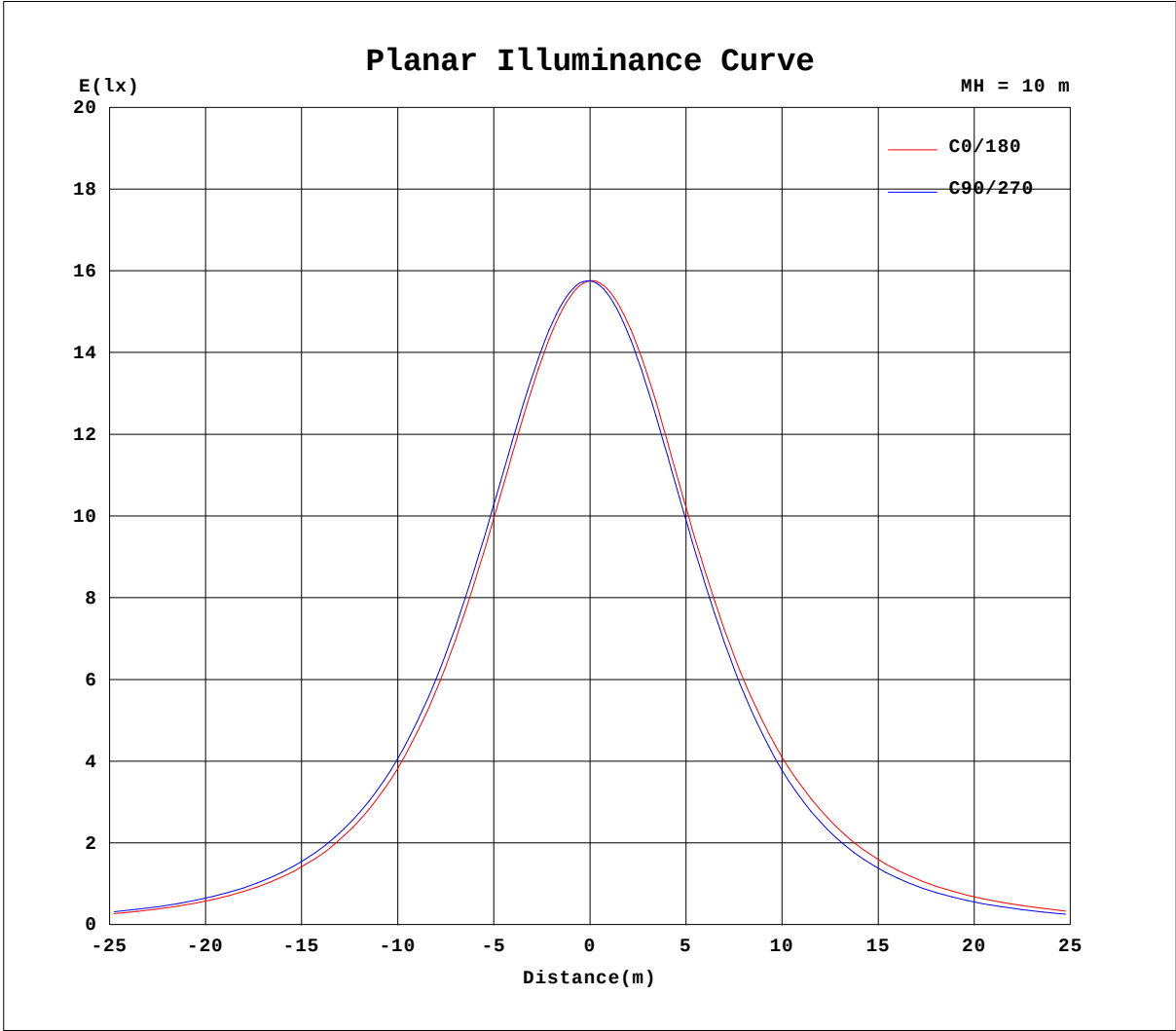
AvgL	cd/m2
L_0~180(65)av	15874
L_0~180(75)av	15762
L_0~180(85)av	17535
L_90~270(65)av	15170
L_90~270(75)av	14503
L_90~270(85)av	14613
L_45(65)av	15520
L_45(75)av	15115
L_45(85)av	16076

Standard: GB/T 29293-2012

C Range: 0 - 360DEG
C Interval: 90.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:
Test Date:2024-03-20

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=1.0964]
Remarks:

Planar Illuminance Curve



C Range: 0 - 360DEG
C Interval: 90.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:
Test Date:2024-03-20

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=1.0964]
Remarks:

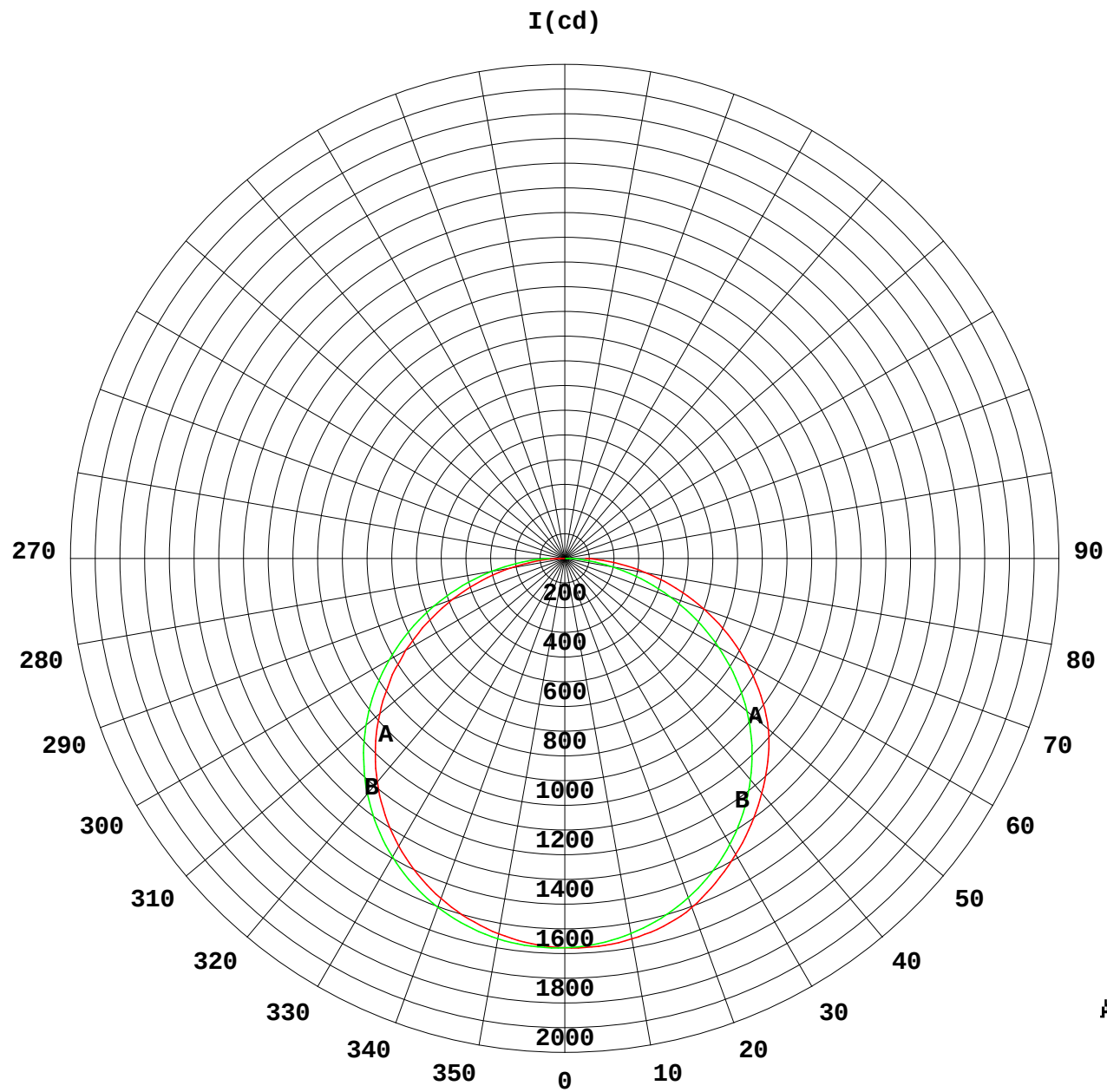
EVERFINE GONIOPHOTOMETERS SYSTEM TEST REPORT

Photometric Data Table [cd]

G/C	0.0	90.0	180.0	270.0
0.0	1576	1576	1576	1576
3.0	1571	1577	1577	1571
6.0	1562	1574	1575	1562
9.0	1548	1567	1567	1548
12.0	1531	1555	1556	1530
15.0	1510	1539	1542	1508
18.0	1484	1519	1522	1481
21.0	1456	1494	1494	1451
24.0	1422	1466	1459	1417
27.0	1385	1433	1423	1379
30.0	1344	1395	1384	1337
33.0	1300	1355	1343	1291
36.0	1251	1309	1301	1241
39.0	1199	1260	1256	1188
42.0	1144	1208	1210	1131
45.0	1084	1152	1162	1071
48.0	1023	1092	1113	1007
51.0	956.5	1029	1056	939.9
54.0	885.7	962.5	991.1	869.0
57.0	816.3	893.2	923.0	794.6
60.0	743.5	821.2	852.7	719.2
63.0	664.0	746.1	779.2	640.2
66.0	586.2	668.5	703.2	560.7
69.0	508.1	590.5	625.6	480.9
72.0	429.5	509.8	546.4	400.3
75.0	349.9	429.7	466.0	321.0
78.0	272.4	349.3	385.7	244.7
81.0	196.7	271.7	306.0	170.6
84.0	124.4	197.3	229.0	102.4
87.0	58.08	127.7	155.5	41.88
90.0	2.762	62.43	84.41	3.687

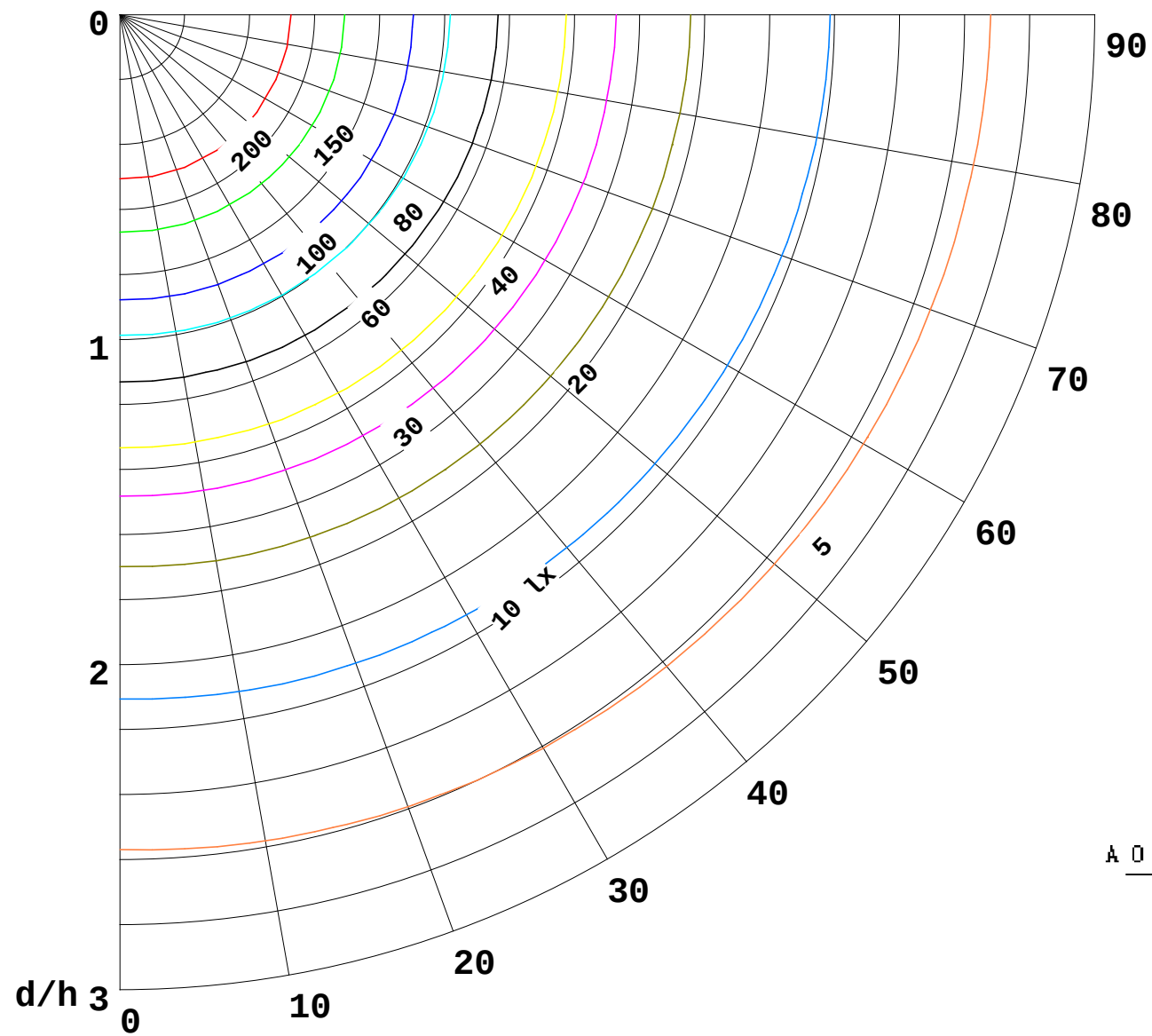
C Range: 0 - 360DEG
C Interval: 90.0DEG
Test Speed: HIGH
Temperature: 25.3DEG
Operators:
Test Date: 2024-03-20

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=1.0964]
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

50

30

20

