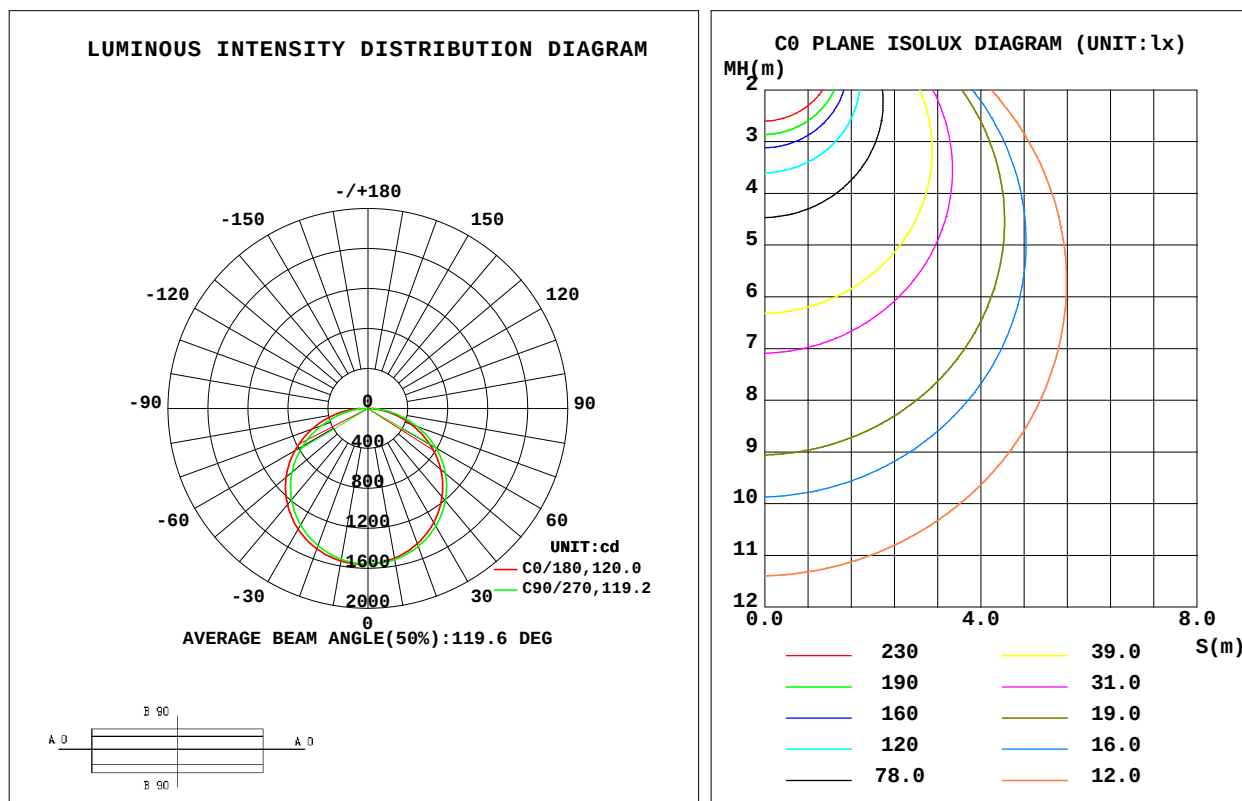


EVERFINE GONIOPHOTOMETERS SYSTEM TEST REPORT

LUMINAIRE PHOTOMETRIC TEST REPORT

Test:U:120.32V I:0.3253A P:38.954W PF:0.9954 Freq:59.98Hz Lamp Flux:4871.8x1 lm		
NAME:	TYPE:	WEIGHT:
SPEC.:100-277v	DIM.:	SERIAL No.:
MFR.:	SUR.:	Shielding Angle:

DATA OF LAMP		PHOTOMETRIC DATA Eff: 125.07 lm/W			
MODEL		I _{max} (cd)	1560	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)	4871.8	h UP, DN(C0-180)	0.0,48.6
NOMINAL FLUX(lm)	4871.8	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	1521	1536	1549	1533					0- 10	147.6	147.6	3.03, 3.03
20	1441	1468	1495	1462					10- 20	425.4	573.0	11.8, 11.8
30	1318	1357	1397	1347					20- 30	653.0	1226	25.2, 25.2
40	1153	1205	1254	1190					30- 40	802.8	2029	41.6, 41.6
50	951.4	1013	1070	993.8					40- 50	855.3	2884	59.2, 59.2
60	716.6	782.2	846.0	756.2					50- 60	799.8	3684	75.6, 75.6
70	456.7	520.5	590.9	489.7					60- 70	639.7	4324	88.7, 88.7
80	201.3	252.9	320.9	223.4					70- 80	401.8	4725	97, 97
90	1.920	35.13	79.18	15.69					80- 90	146.5	4872	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		

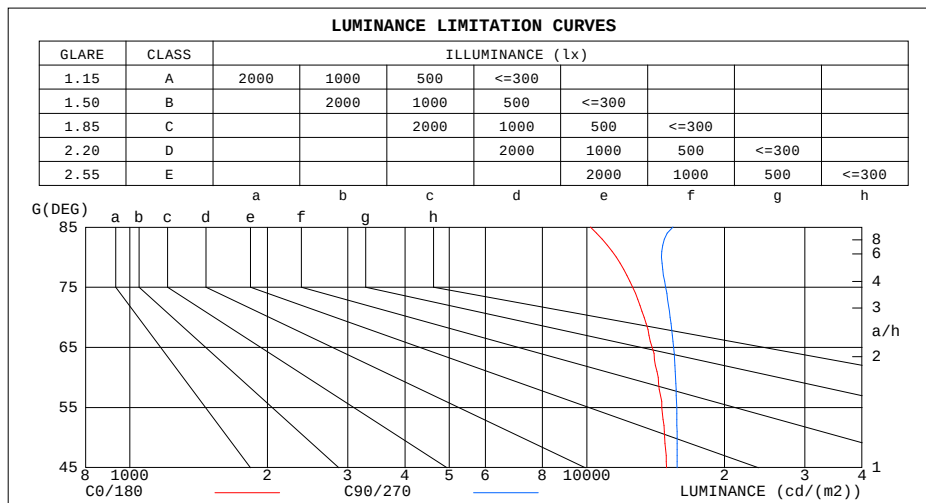
C Range: 0 - 360DEG
C Interval: 90.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:
Test Date:13 March 2024

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:120.32V I:0.3253A P:38.954W PF:0.9954 Freq:59.98Hz Lamp Flux:4871.8x1 lm		
NAME:	TYPE:	WEIGHT:
SPEC.:100-277v	DIM.:	SERIAL No.:
MFR.:	SUR.:	Shielding Angle:



LUMINANCE cd/(m2)		
G(DEG)	C0/180	C90/270
85	10178	15430
80	11595	14566
75	12587	14882
70	13353	15218
65	13897	15482
60	14333	15644
55	14590	15726
50	14802	15759
45	14948	15752

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

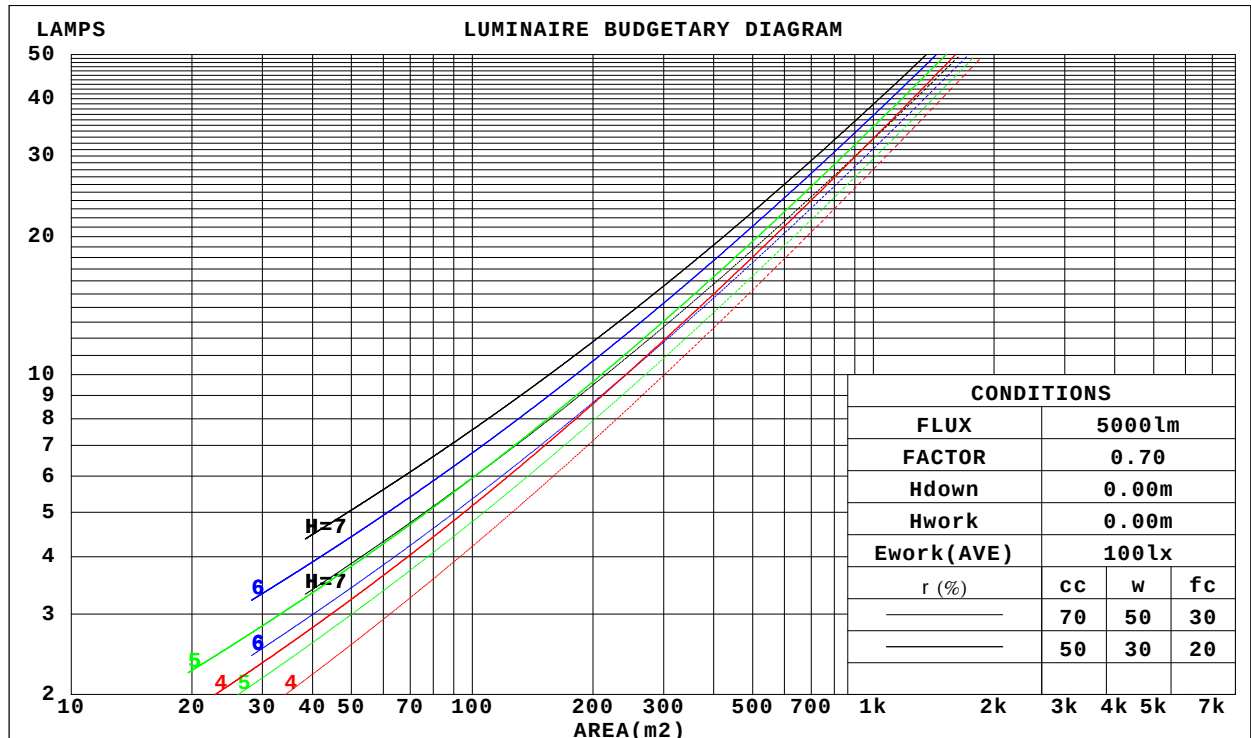
g Range: 0 - 90DEG
g Interval: 1.0DEG
Test System:EVERFINE G0-2000B_V1 SYSTEM V2.0.400
Humidity:65.0%
Test Distance:8.300m [K=1.0723]
Remarks:

EVERFINE GONIOPHOTOMETERS SYSTEM TEST REPORT

CU AND LUMINAIRE BUDGETARY ESTIMATE DIAGRAM

Test:U:120.32V I:0.3253A P:38.954W PF:0.9954 Freq:59.98Hz Lamp Flux:4871.8x1 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	.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	.58	.56
4.0	.69	.59	.52	.67	.59	.52	.65	.57	.51	.62	.56	.51	.60	.54	.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	.39	.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:120.32V I:0.3253A P:38.954W PF:0.9954 Freq:59.98Hz Lamp Flux:4871.8x1 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	.324	.185	.059	.310	.178	.057	.298	.172	.055	.287	.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	.253	.132	.039	.243	.129	.039	.235	.126	.038	.227	.123	.037	
5.0	.237	.121	.035	.233	.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	.100	.028	.193	.098	.028	.187	.096	.028	.181	.094	.028	
8.0	.189	.093	.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:120.32V I:0.3253A P:38.954W PF:0.9954 Freq:59.98Hz Lamp Flux:4871.8x1 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	22.1	23.7	22.4	23.9	24.1	22.4	24.0	22.7	24.2	24.4
	3H	23.7	25.2	24.0	25.4	25.6	24.2	25.6	24.5	25.8	26.1
	4H	24.3	25.7	24.7	26.0	26.2	24.9	26.3	25.2	26.5	26.8
	6H	24.8	26.1	25.2	26.4	26.7	25.5	26.8	25.8	27.1	27.4
	8H	25.0	26.2	25.3	26.5	26.8	25.7	27.0	26.1	27.3	27.6
	12H	25.1	26.3	25.4	26.6	26.9	25.9	27.1	26.3	27.4	27.7
4H	2H	22.8	24.2	23.1	24.4	24.7	23.0	24.4	23.4	24.7	24.9
	3H	24.6	25.8	24.9	26.1	26.4	25.0	26.2	25.3	26.5	26.8
	4H	25.4	26.5	25.7	26.8	27.1	25.8	26.9	26.2	27.3	27.6
	6H	26.0	27.0	26.4	27.3	27.7	26.6	27.6	27.0	27.9	28.3
	8H	26.2	27.1	26.6	27.5	27.9	26.9	27.8	27.3	28.2	28.6
	12H	26.3	27.2	26.8	27.6	28.0	27.1	28.0	27.5	28.4	28.8
8H	4H	25.7	26.6	26.1	27.0	27.4	26.1	27.0	26.5	27.4	27.8
	6H	26.5	27.3	26.9	27.7	28.1	27.0	27.8	27.5	28.2	28.6
	8H	26.8	27.5	27.3	27.9	28.4	27.4	28.1	27.9	28.5	29.0
	12H	27.0	27.6	27.5	28.1	28.6	27.8	28.4	28.3	28.8	29.3
12H	4H	25.7	26.6	26.2	27.0	27.4	26.1	27.0	26.6	27.4	27.8
	6H	26.6	27.3	27.0	27.7	28.2	27.1	27.8	27.6	28.2	28.7
	8H	26.9	27.5	27.4	28.0	28.5	27.5	28.1	28.0	28.6	29.1
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, 4872 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: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:120.32V I:0.3253A P:38.954W PF:0.9954 Freq:59.98Hz Lamp Flux:4871.8x1 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	84	78	92	83	77	88	81	75	67
2.50	98	89	83	95	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		

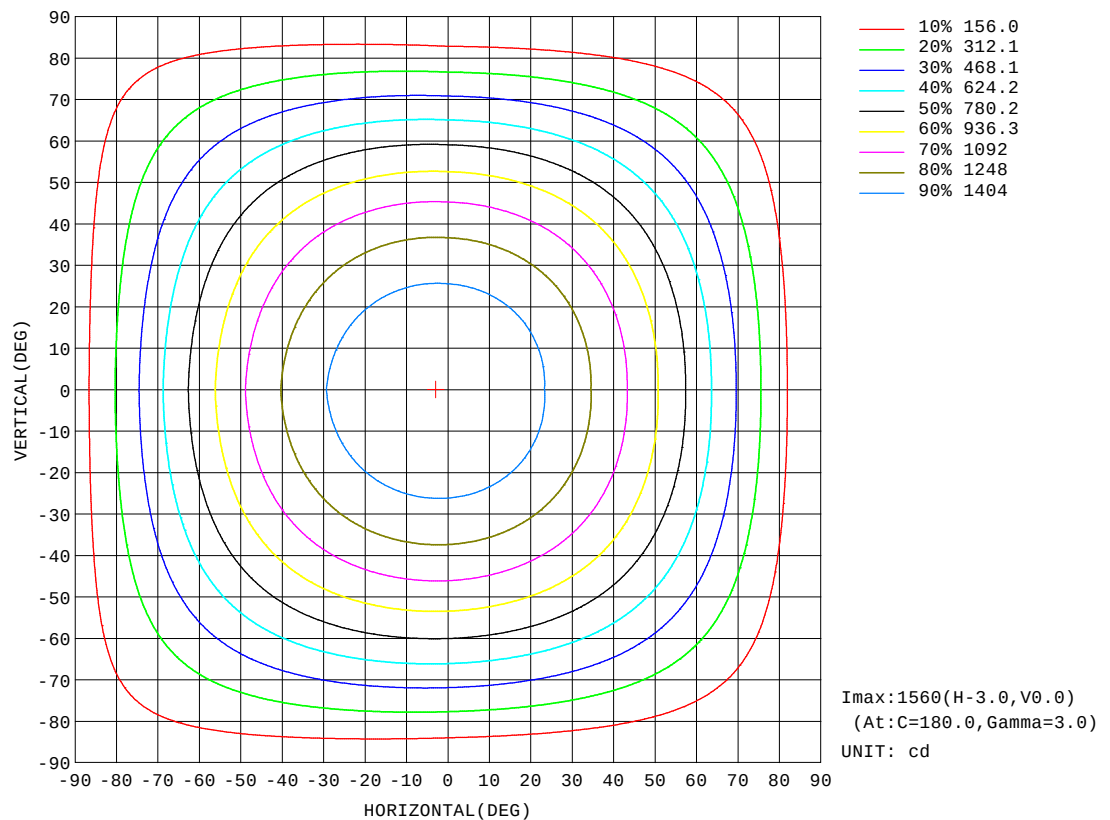
C Range: 0 - 360DEG
 C Interval: 90.0DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:
 Test Date:13 March 2024

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:120.32V I:0.3253A P:38.954W PF:0.9954 Freq:59.98Hz Lamp Flux:4871.8x1 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

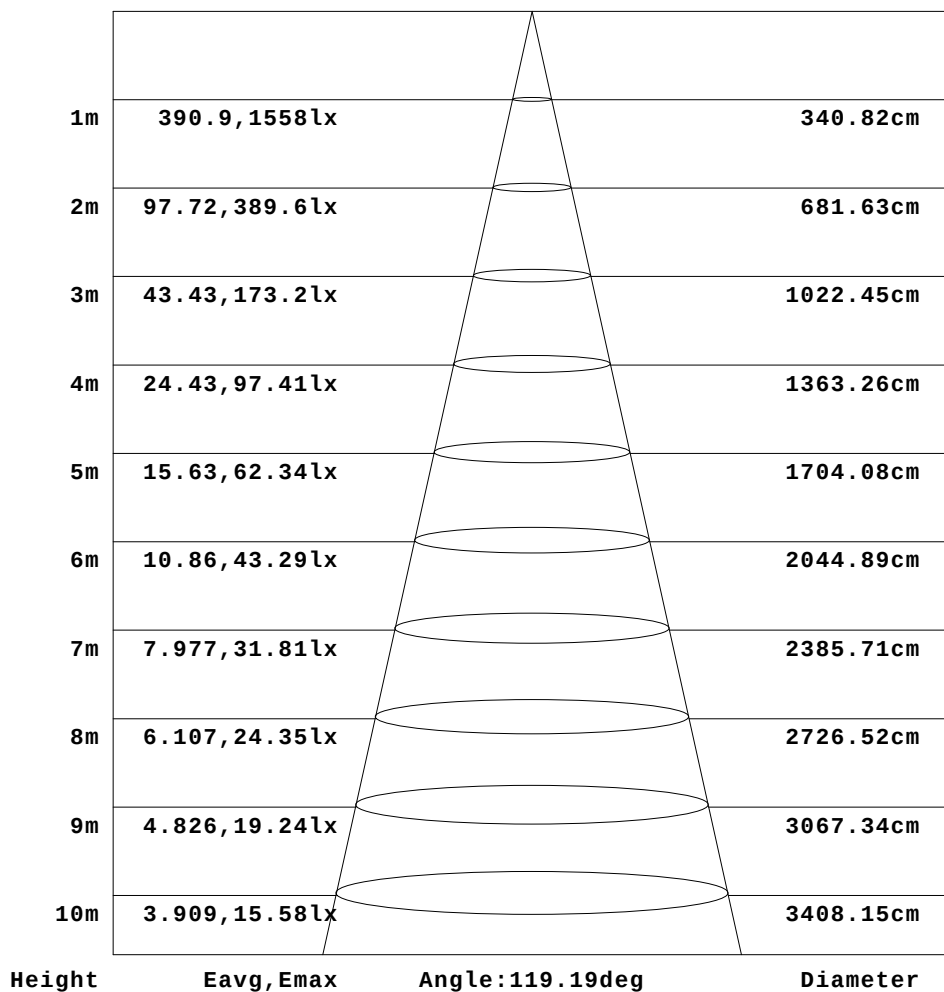
g Range: 0 - 90DEG
g Interval: 1.0DEG
Test System:EVERFINE G0-2000B_V1 SYSTEM V2.0.400
Humidity:65.0%
Test Distance:8.300m [K=1.0723]
Remarks:

EVERFINE GONIOPHOTOMETERS SYSTEM TEST REPORT

AAI Figure

Test:U:120.32V I:0.3253A P:38.954W PF:0.9954 Freq:59.98Hz Lamp Flux:4871.8x1 lm		
NAME:	TYPE:	WEIGHT:
SPEC.:100-277v	DIM.:	SERIAL No.:
MFR.:	SUR.:	Shielding Angle:

Flux out:3684 lm



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

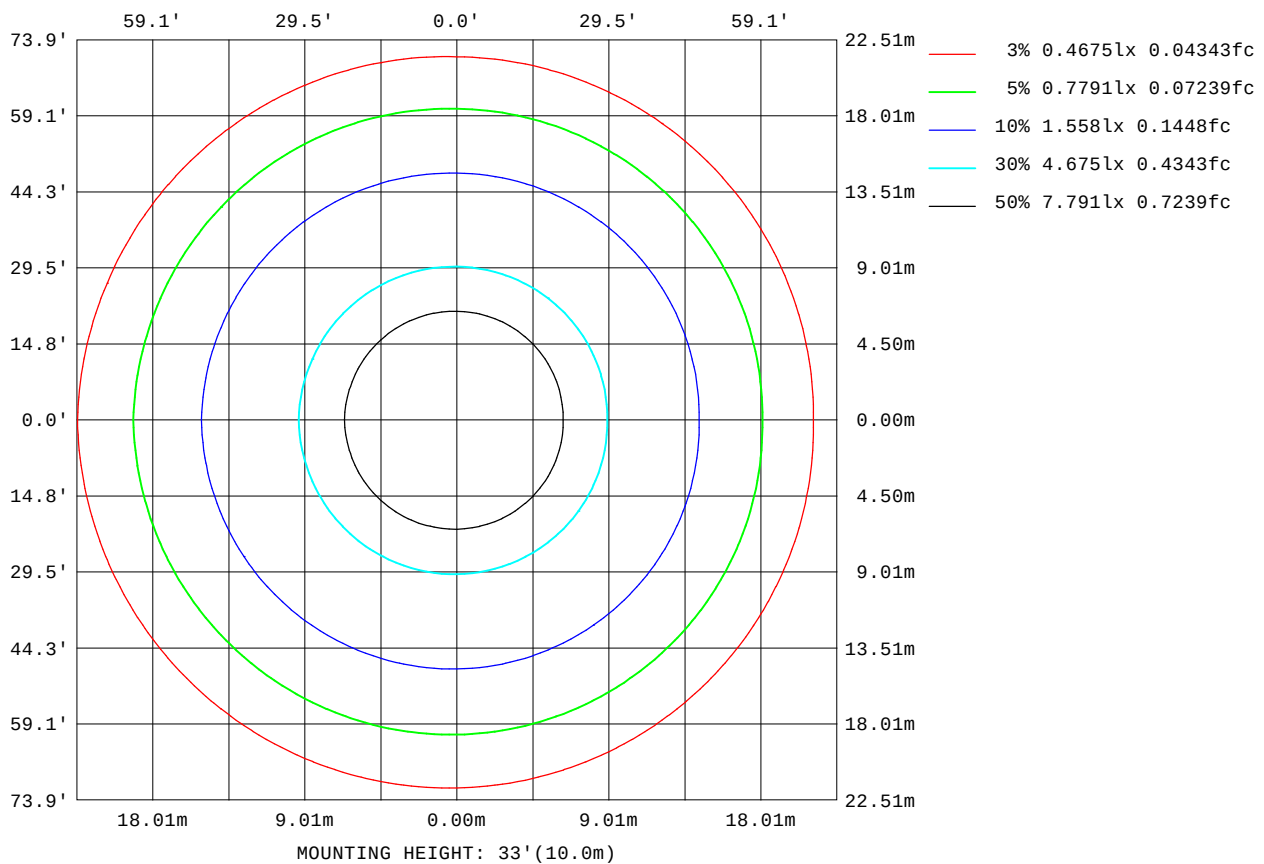
C Range: 0 - 360DEG
C Interval: 90.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:
Test Date:13 March 2024

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:120.32V I:0.3253A P:38.954W PF:0.9954 Freq:59.98Hz Lamp Flux:4871.8x1 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:120.32V I:0.3253A P:38.954W PF:0.9954 Freq:59.98Hz Lamp Flux:4871.8x1 lm		
NAME:	TYPE:	WEIGHT:
SPEC.:100-277v	DIM.:	SERIAL No.:
MFR.:	SUR.:	Shielding Angle:

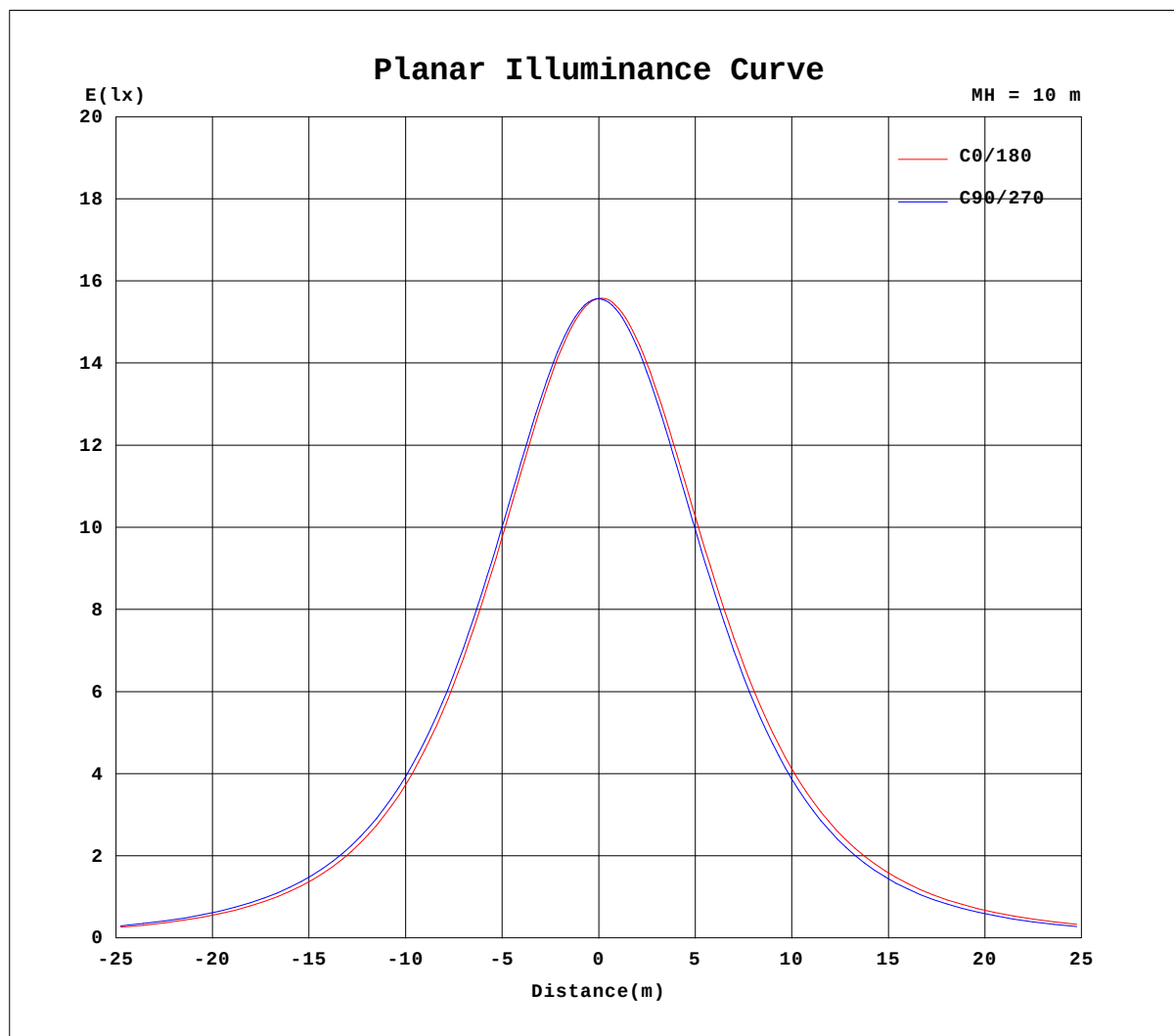
AvgL	cd/m2
L_0~180(65)av	15490
L_0~180(75)av	15100
L_0~180(85)av	16235
L_90~270(65)av	15135
L_90~270(75)av	14266
L_90~270(85)av	13860
L_45(65)av	15368
L_45(75)av	14735
L_45(85)av	15129

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:

```

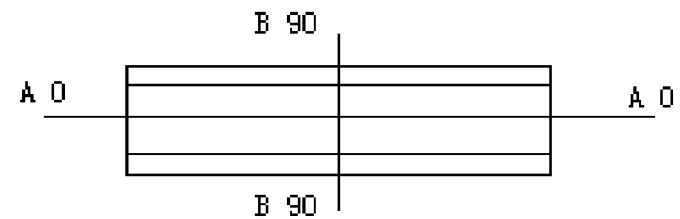
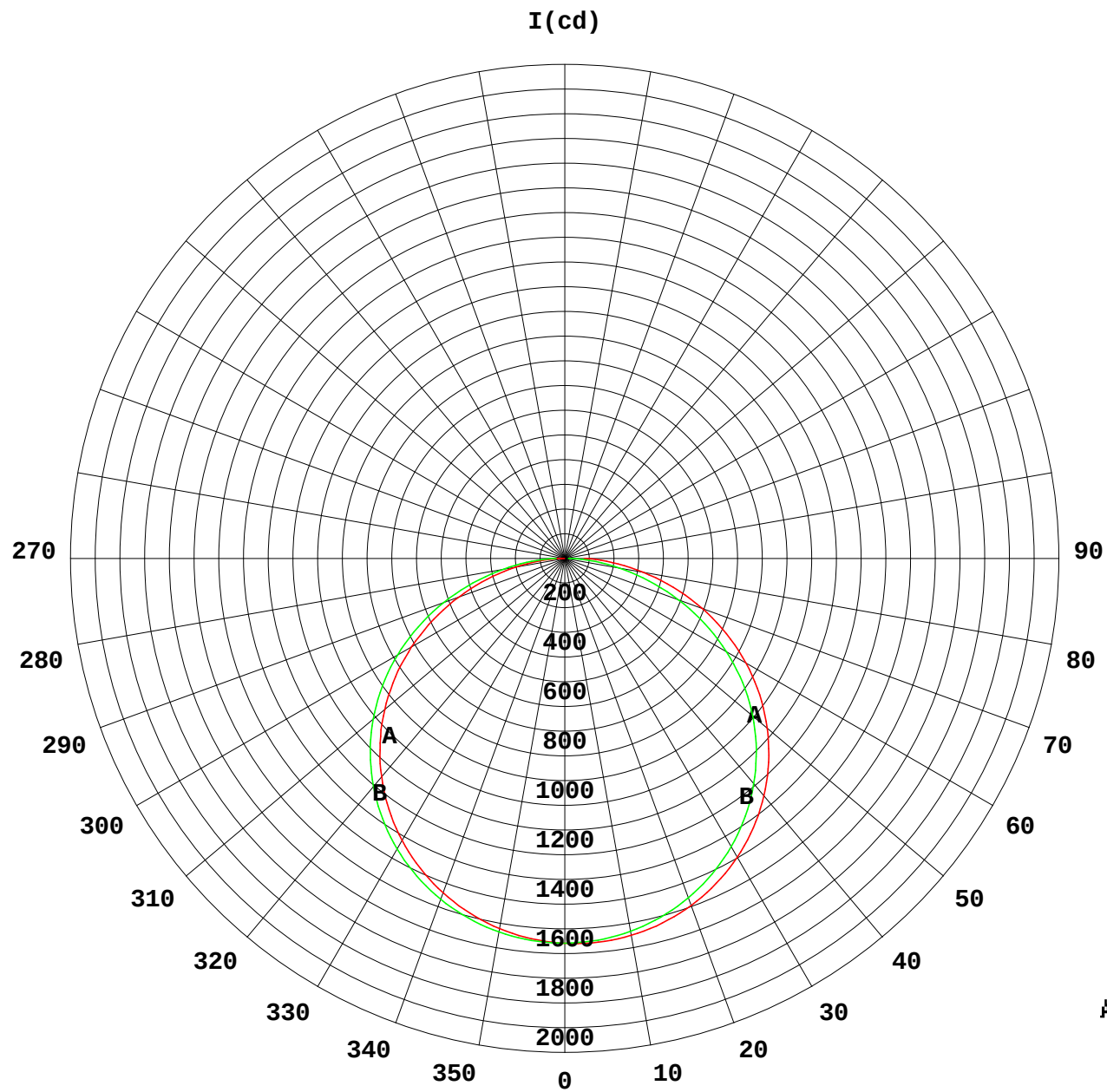
EVERFINE GONIOPHOTOMETERS SYSTEM TEST REPORT

Photometric Data Table [cd]

G/C	0.0	90.0	180.0	270.0
0.0	1558	1557	1558	1557
3.0	1552	1555	1560	1555
6.0	1542	1550	1558	1548
9.0	1527	1540	1552	1537
12.0	1509	1526	1542	1522
15.0	1486	1507	1528	1503
18.0	1460	1486	1510	1480
21.0	1430	1459	1487	1452
24.0	1396	1429	1461	1421
27.0	1359	1395	1431	1386
30.0	1318	1357	1397	1347
33.0	1273	1316	1358	1305
36.0	1224	1271	1316	1258
39.0	1172	1222	1270	1208
42.0	1117	1170	1220	1154
45.0	1057	1114	1167	1097
48.0	995.6	1054	1109	1036
51.0	930.4	991.7	1049	971.2
54.0	859.8	924.8	984.9	902.9
57.0	789.5	854.8	916.9	830.5
60.0	716.6	782.2	846.0	756.2
63.0	637.9	706.1	771.9	678.1
66.0	560.0	627.7	695.4	598.0
69.0	482.8	548.0	617.6	517.1
72.0	404.1	466.1	536.9	434.8
75.0	325.8	385.2	455.8	353.3
78.0	250.3	304.9	376.0	274.3
81.0	177.8	228.3	295.0	199.0
84.0	109.8	156.6	218.8	128.6
87.0	49.21	92.30	147.1	66.90
90.0	1.920	35.13	79.18	15.69

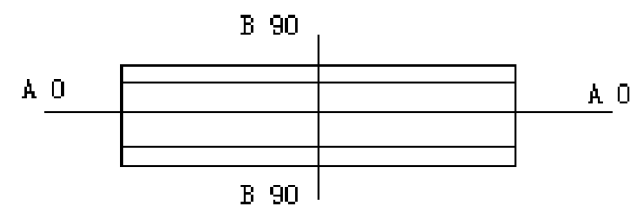
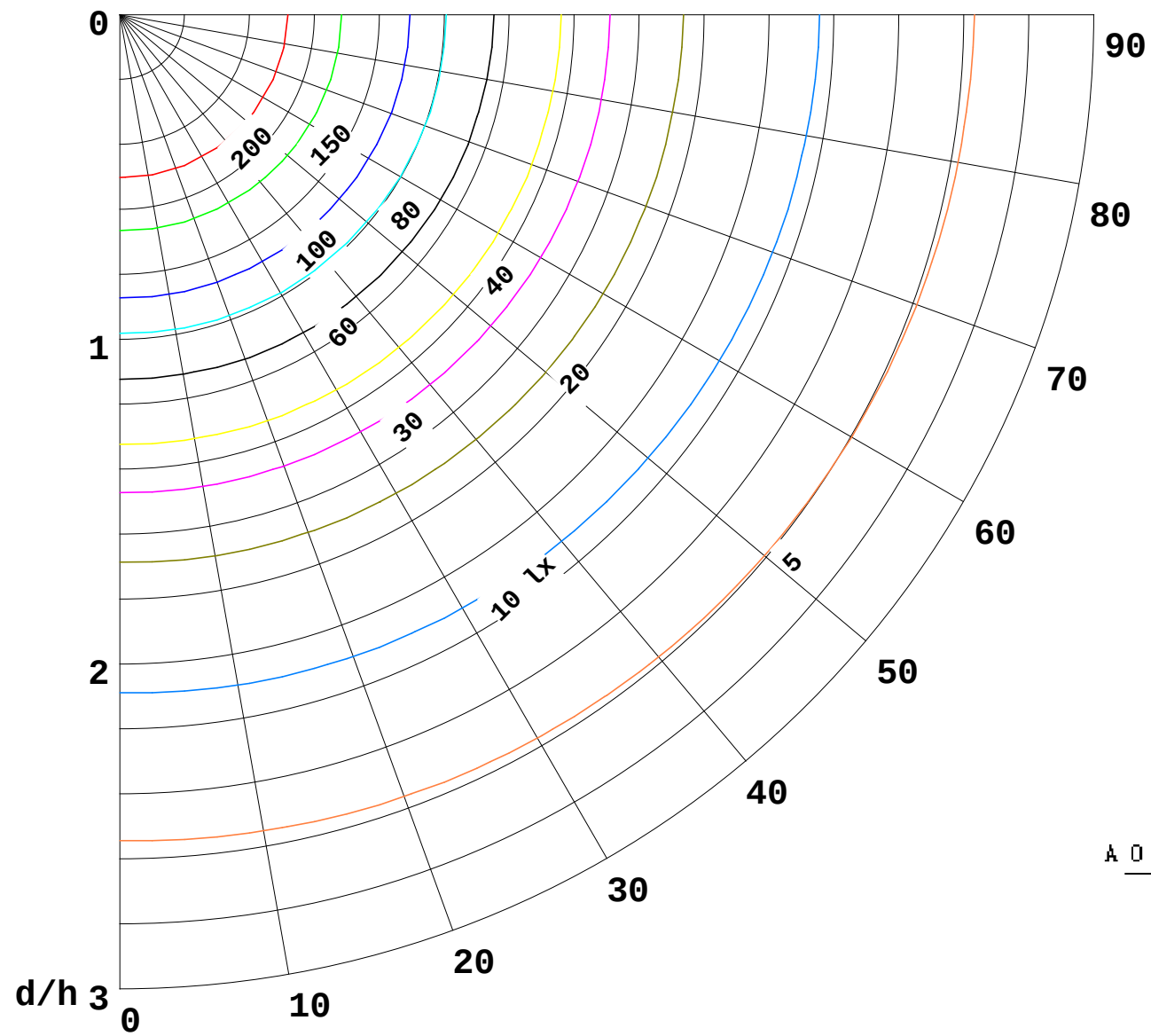
C Range: 0 - 360DEG
C Interval: 90.0DEG
Test Speed: HIGH
Temperature: 25.3DEG
Operators:
Test Date: 13 March 2024

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	Pw	Pfc
_____	70	50	30
_____	50	30	20

