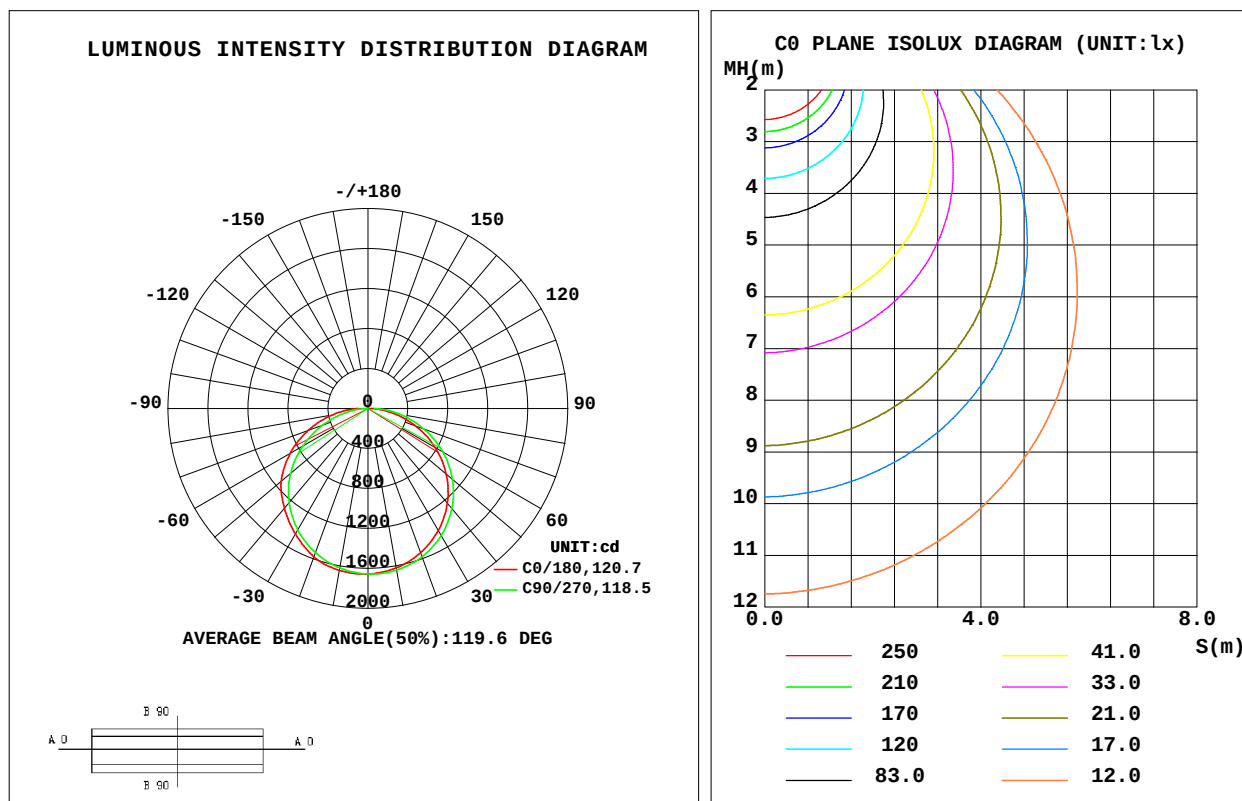


EVERFINE GONIOPHOTOMETERS SYSTEM TEST REPORT

LUMINAIRE PHOTOMETRIC TEST REPORT

Test:U:120.31V I:0.3253A P:38.972W PF:0.9959 Freq:59.98Hz Lamp Flux:5184.45x1 lm		
NAME:	TYPE:	WEIGHT:
SPEC.:100-277v	DIM.:	SERIAL No.:
MFR.:	SUR.:	Shielding Angle:

DATA OF LAMP		PHOTOMETRIC DATA Eff: 133.03 lm/W			
MODEL		I _{max} (cd)	1658	S/MH(C0/180)	1.30
NOMINAL POWER(W)		LOR(%)	100.0	S/MH(C90/270)	1.26
RATED VOLTAGE(V)	120-277	TOTAL FLUX(lm)	5184.5	h UP, DN(C0-180)	0.0,49.9
NOMINAL FLUX(lm)	5184.45	CIE CLASS	DIRECT	h UP, DN(C180-360)	0.0,50.1
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	1620	1642	1645	1620					0- 10	156.9	156.9	3.03, 3.03
20	1537	1580	1582	1535					10- 20	452.2	609.1	11.7, 11.7
30	1409	1466	1452	1404					20- 30	691.9	1301	25.1, 25.1
40	1236	1306	1303	1229					30- 40	848.3	2149	41.5, 41.5
50	1022	1104	1135	1012					40- 50	905.2	3055	58.9, 58.9
60	775.9	862.8	900.3	755.6					50- 60	848.9	3903	75.3, 75.3
70	503.3	591.8	633.5	477.0					60- 70	681.8	4585	88.4, 88.4
80	231.0	312.0	351.4	205.2					70- 80	435.1	5020	96.8, 96.8
90	2.781	65.91	90.18	4.128					80- 90	164.1	5184	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		

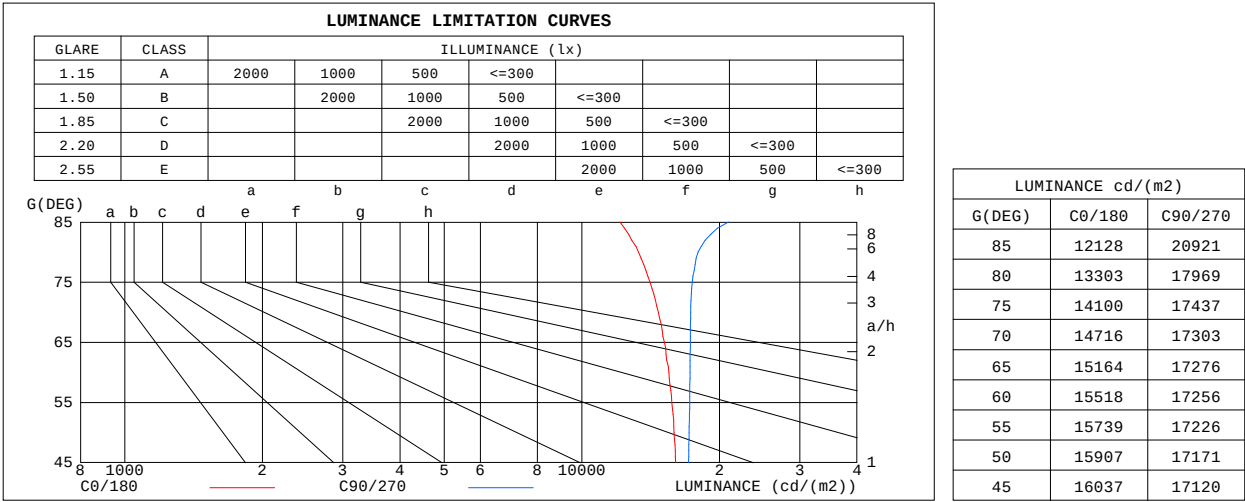
C Range: 0 - 360DEG
C Interval: 90.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:
Test Date:2024-03-20

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:120.31V I:0.3253A P:38.972W PF:0.9959 Freq:59.98Hz Lamp Flux:5184.45x1 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

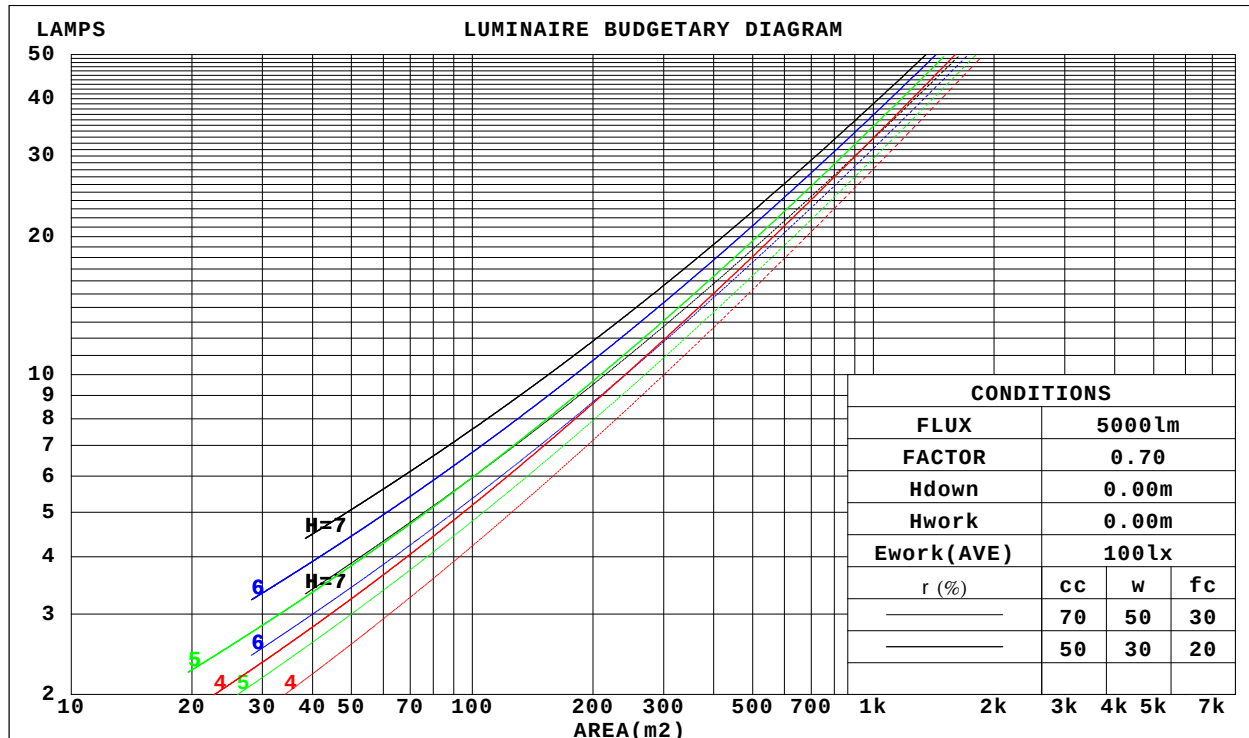
g Range: 0 - 90DEG
g Interval: 1.0DEG
Test System:EVERFINE G0-2000B_V1 SYSTEM V2.0.400
Humidity:65.0%
Test Distance:8.300m [K=1.0964]
Remarks:

EVERFINE GONIOPHOTOMETERS SYSTEM TEST REPORT

CU AND LUMINAIRE BUDGETARY ESTIMATE DIAGRAM

Test:U:120.31V I:0.3253A P:38.972W PF:0.9959 Freq:59.98Hz Lamp Flux:5184.45x1 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	.64	.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	.33	.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:120.31V I:0.3253A P:38.972W PF:0.9959 Freq:59.98Hz Lamp Flux:5184.45x1 lm					
NAME:			TYPE:		WEIGHT:
SPEC.:100-277v			DIM.:		SERIAL No.:
MFR.:			SUR.:		Shielding Angle:

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 Wall Exitance Coefficients(WEC)															
0.0																
1.0	.333	.190	.060	.326	.186	.059	.313	.179	.057	.300	.173	.056	.289	.168	.054	
2.0	.308	.169	.052	.301	.166	.051	.289	.161	.050	.279	.156	.049	.268	.152	.048	
3.0	.282	.150	.045	.276	.148	.045	.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	.182	.094	.028	
8.0	.190	.093	.026	.186	.092	.026	.181	.090	.026	.175	.089	.026	.170	.087	.025	
9.0	.177	.086	.024	.175	.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
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	.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:120.31V I:0.3253A P:38.972W PF:0.9959 Freq:59.98Hz Lamp Flux:5184.45x1 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	22.5	24.0	22.7	24.2	24.4	22.8	24.4	23.1	24.6	24.8	
	3H	24.1	25.5	24.4	25.8	26.0	24.7	26.1	25.0	26.3	
	4H	24.8	26.2	25.1	26.4	26.7	25.5	26.9	25.8	27.1	
	6H	25.3	26.6	25.6	26.9	27.2	26.2	27.5	26.5	27.7	
	8H	25.5	26.7	25.8	27.0	27.3	26.5	27.7	26.8	28.0	
	12H	25.6	26.8	26.0	27.1	27.4	26.7	27.9	27.1	28.2	
4H	2H	23.2	24.6	23.5	24.8	25.1	23.5	24.9	23.8	25.1	
	3H	25.0	26.2	25.4	26.5	26.8	25.5	26.7	25.8	27.0	
	4H	25.8	26.9	26.2	27.3	27.6	26.4	27.5	26.8	27.9	
	6H	26.5	27.5	26.9	27.8	28.2	27.3	28.3	27.7	28.6	
	8H	26.7	27.7	27.2	28.0	28.4	27.6	28.6	28.1	28.9	
	12H	26.9	27.8	27.3	28.2	28.6	28.0	28.8	28.4	29.2	
8H	4H	26.2	27.1	26.6	27.5	27.9	26.7	27.7	27.1	28.0	
	6H	27.1	27.8	27.5	28.3	28.7	27.8	28.5	28.2	28.9	
	8H	27.4	28.1	27.9	28.5	29.0	28.2	28.9	28.7	29.4	
	12H	27.7	28.3	28.2	28.7	29.2	28.7	29.3	29.2	29.8	
12H	4H	26.3	27.1	26.7	27.5	27.9	26.7	27.6	27.2	28.0	
	6H	27.2	27.9	27.6	28.3	28.8	27.8	28.5	28.3	29.0	
	8H	27.6	28.2	28.1	28.6	29.1	28.4	29.0	28.9	29.4	
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, 5184 lm Total Lamp Luminous Flux Corrected ($8\log(F/F_0) = 5.7$)

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:120.31V I:0.3253A P:38.972W PF:0.9959 Freq:59.98Hz Lamp Flux:5184.45x1 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	81	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	93	84
ROOM INDEX	UF(total)									Direct
According to DIN EN 13032-2 2004			Suspended					SHRNOM = 1.25		

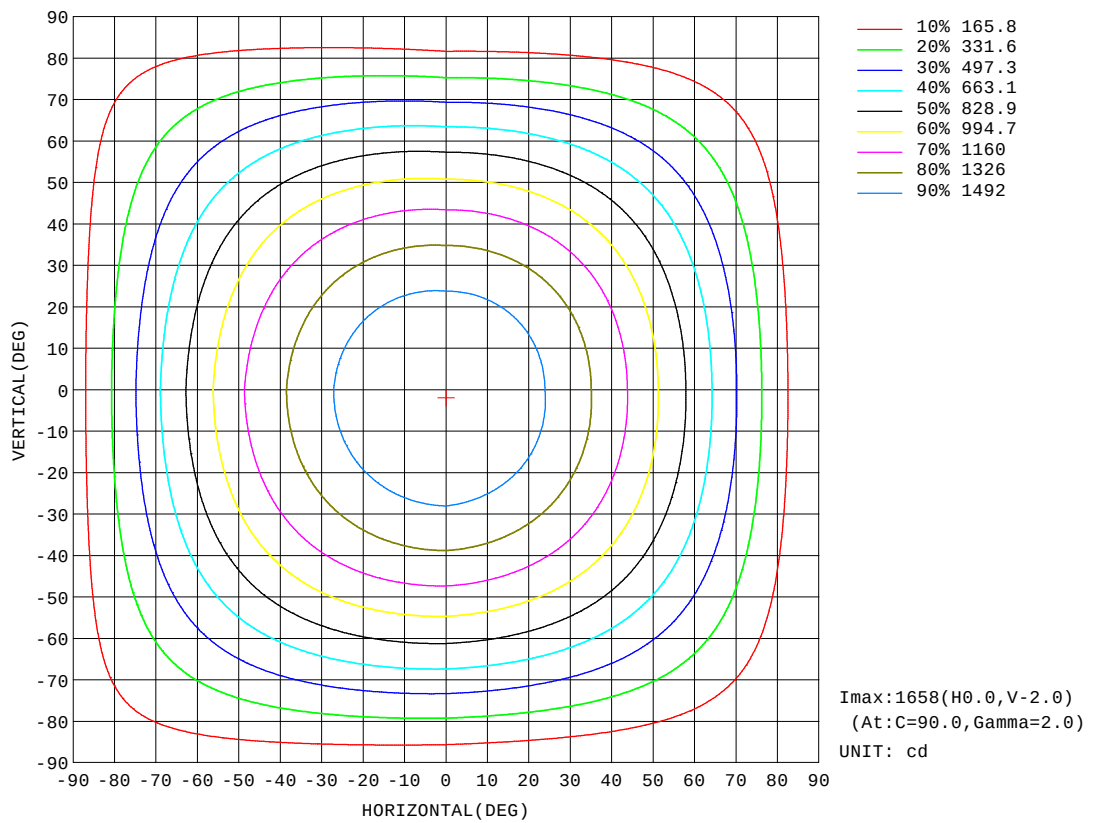
C Range: 0 - 360DEG
 C Interval: 90.0DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:
 Test Date:2024-03-20

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:120.31V I:0.3253A P:38.972W PF:0.9959 Freq:59.98Hz Lamp Flux:5184.45x1 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

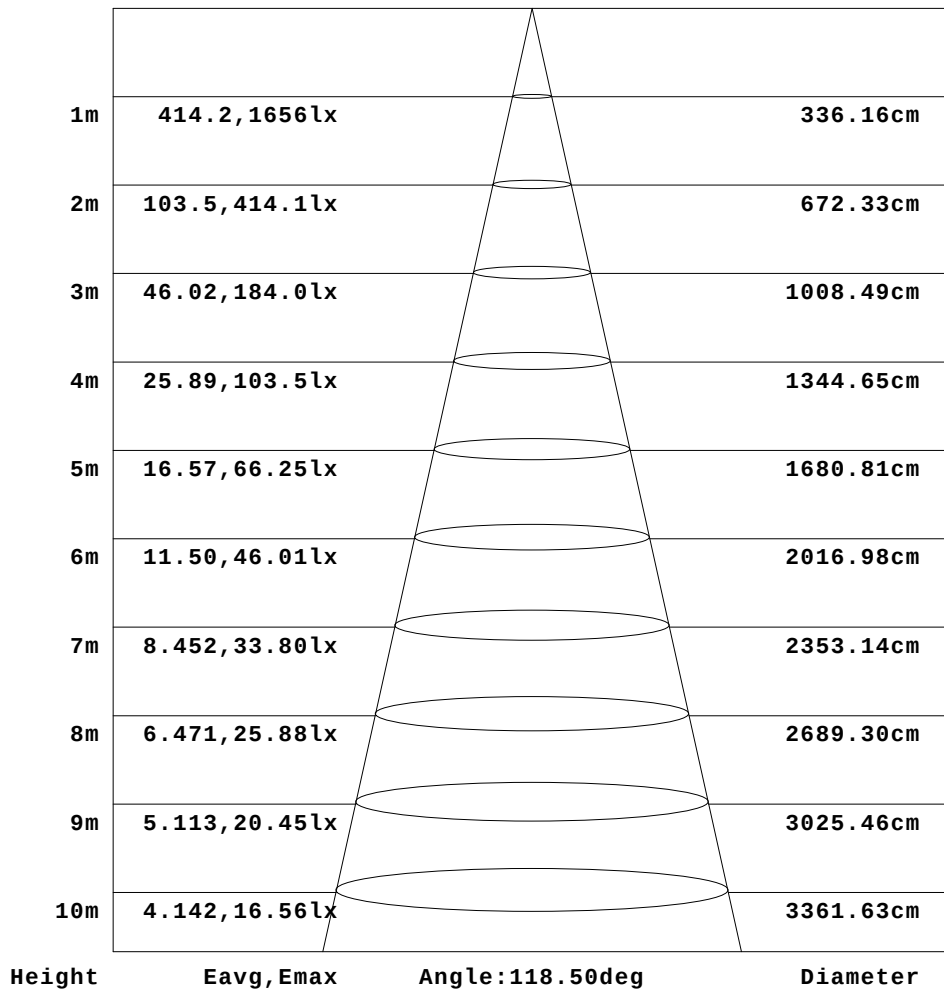
g Range: 0 - 90DEG
g Interval: 1.0DEG
Test System:EVERFINE G0-2000B_V1 SYSTEM V2.0.400
Humidity:65.0%
Test Distance:8.300m [K=1.0964]
Remarks:

EVERFINE GONIOPHOTOMETERS SYSTEM TEST REPORT

AAI Figure

Test:U:120.31V I:0.3253A P:38.972W PF:0.9959 Freq:59.98Hz Lamp Flux:5184.45x1 lm		
NAME:	TYPE:	WEIGHT:
SPEC.:100-277v	DIM.:	SERIAL No.:
MFR.:	SUR.:	Shielding Angle:

Flux out:3903 lm



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

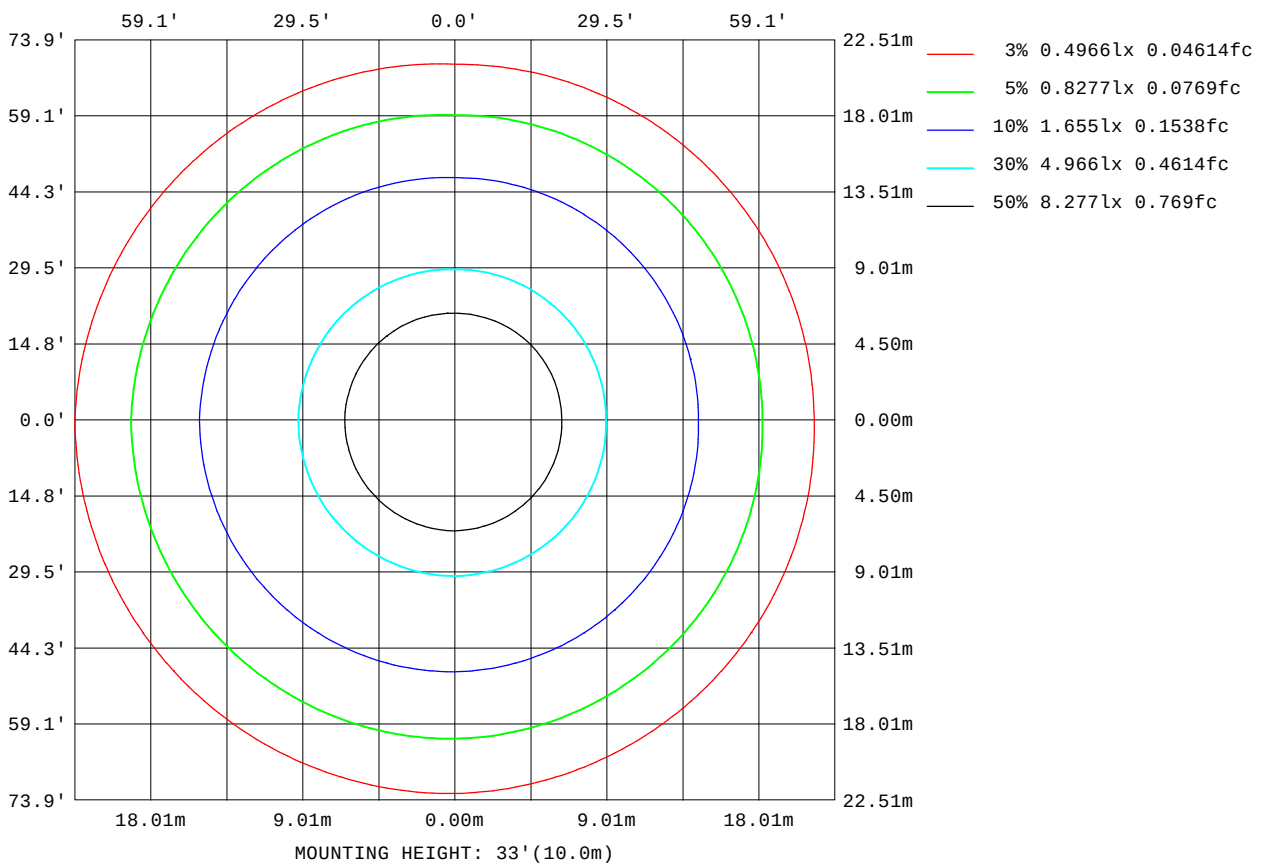
C Range: 0 - 360DEG
 C Interval: 90.0DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:
 Test Date:2024-03-20

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:120.31V I:0.3253A P:38.972W PF:0.9959 Freq:59.98Hz Lamp Flux:5184.45x1 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:120.31V I:0.3253A P:38.972W PF:0.9959 Freq:59.98Hz Lamp Flux:5184.45x1 lm		
NAME:	TYPE:	WEIGHT:
SPEC.:100-277v	DIM.:	SERIAL No.:
MFR.:	SUR.:	Shielding Angle:

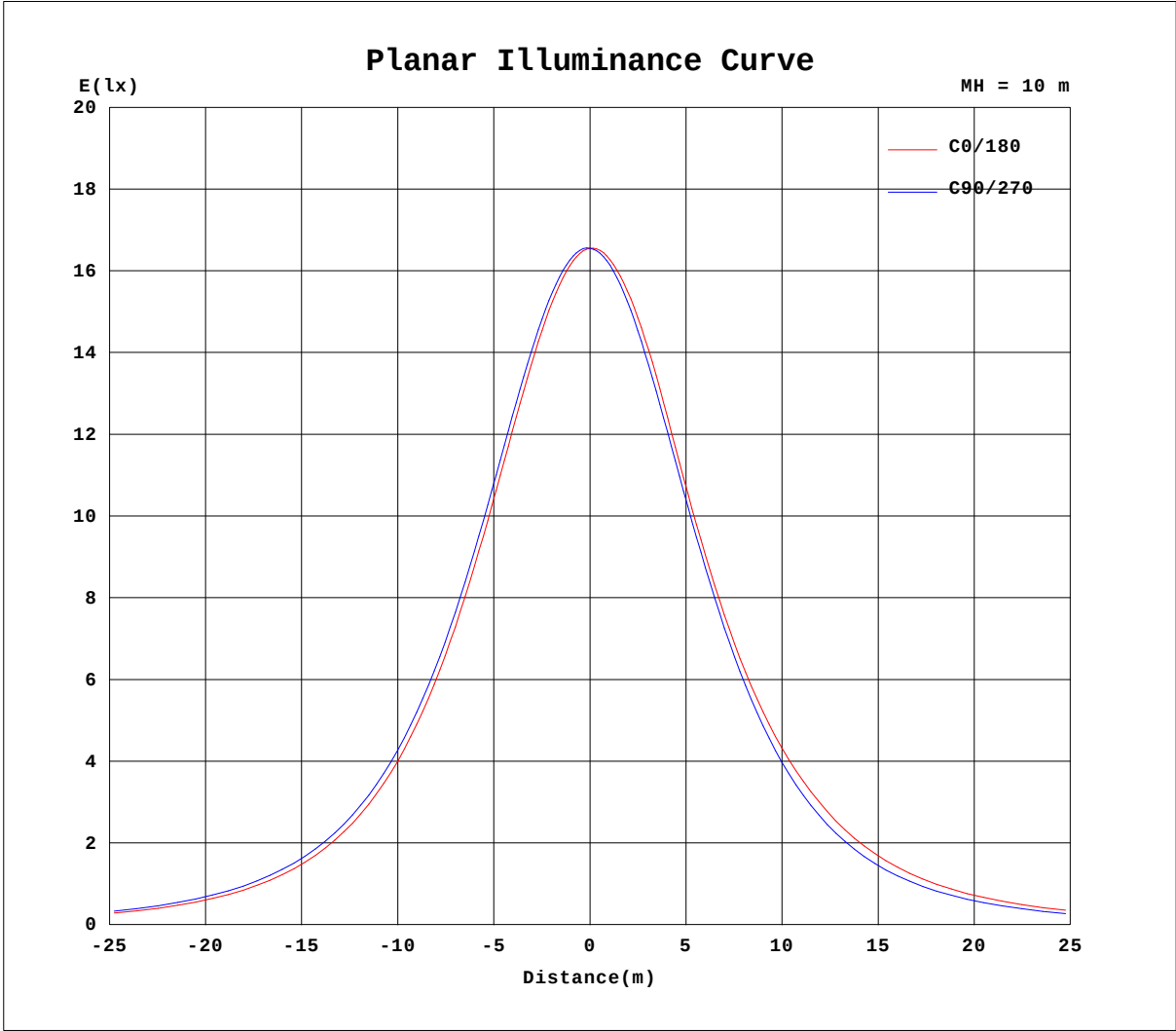
AvgL	cd/m2
L_0~180(65)av	16692
L_0~180(75)av	16569
L_0~180(85)av	18479
L_90~270(65)av	15939
L_90~270(75)av	15236
L_90~270(85)av	15366
L_45(65)av	16317
L_45(75)av	15890
L_45(85)av	16930

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:

UNIT: cd

```

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:

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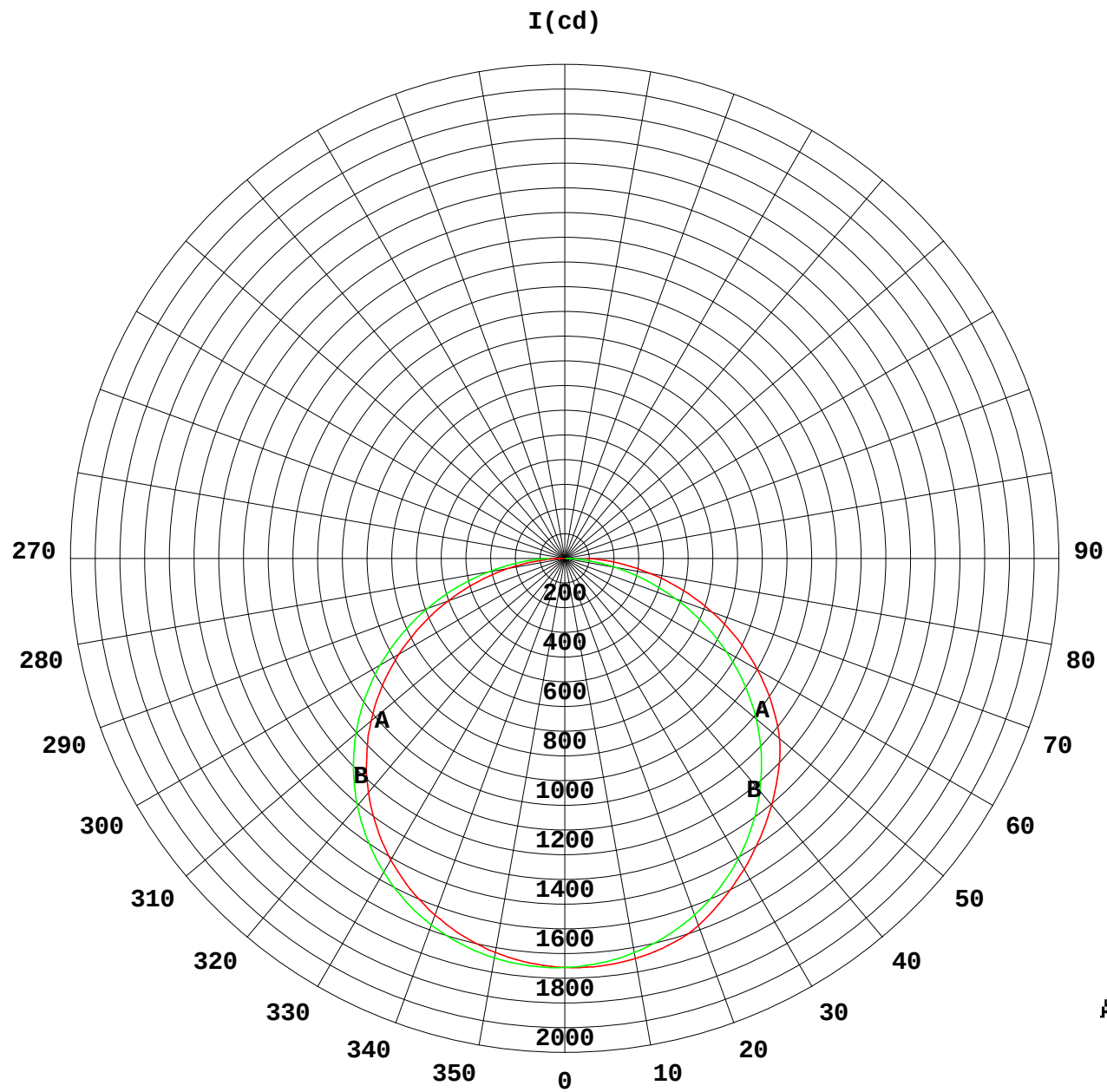
EVERFINE GONIOPHOTOMETERS SYSTEM TEST REPORT

Photometric Data Table [cd]

G/C	0.0	90.0	180.0	270.0
0.0	1655	1656	1655	1656
3.0	1650	1657	1657	1651
6.0	1640	1653	1655	1641
9.0	1625	1646	1648	1626
12.0	1607	1633	1637	1607
15.0	1584	1616	1621	1584
18.0	1556	1595	1601	1556
21.0	1527	1570	1570	1524
24.0	1491	1540	1532	1488
27.0	1451	1505	1493	1448
30.0	1409	1466	1452	1404
33.0	1362	1423	1409	1356
36.0	1311	1376	1364	1304
39.0	1256	1324	1318	1248
42.0	1198	1269	1271	1189
45.0	1134	1211	1223	1125
48.0	1071	1147	1172	1058
51.0	1000	1081	1114	987.7
54.0	927.7	1012	1046	913.2
57.0	853.4	938.7	974.3	834.9
60.0	775.9	862.8	900.3	755.6
63.0	693.5	783.6	822.7	672.7
66.0	611.5	702.5	742.6	589.5
69.0	530.4	620.2	661.2	505.6
72.0	448.1	535.6	577.7	420.6
75.0	364.9	451.3	492.7	337.4
78.0	283.8	367.9	409.3	257.3
81.0	205.4	285.4	324.1	179.5
84.0	129.5	207.2	242.9	107.9
87.0	60.32	134.2	165.0	44.17
90.0	2.781	65.91	90.18	4.128

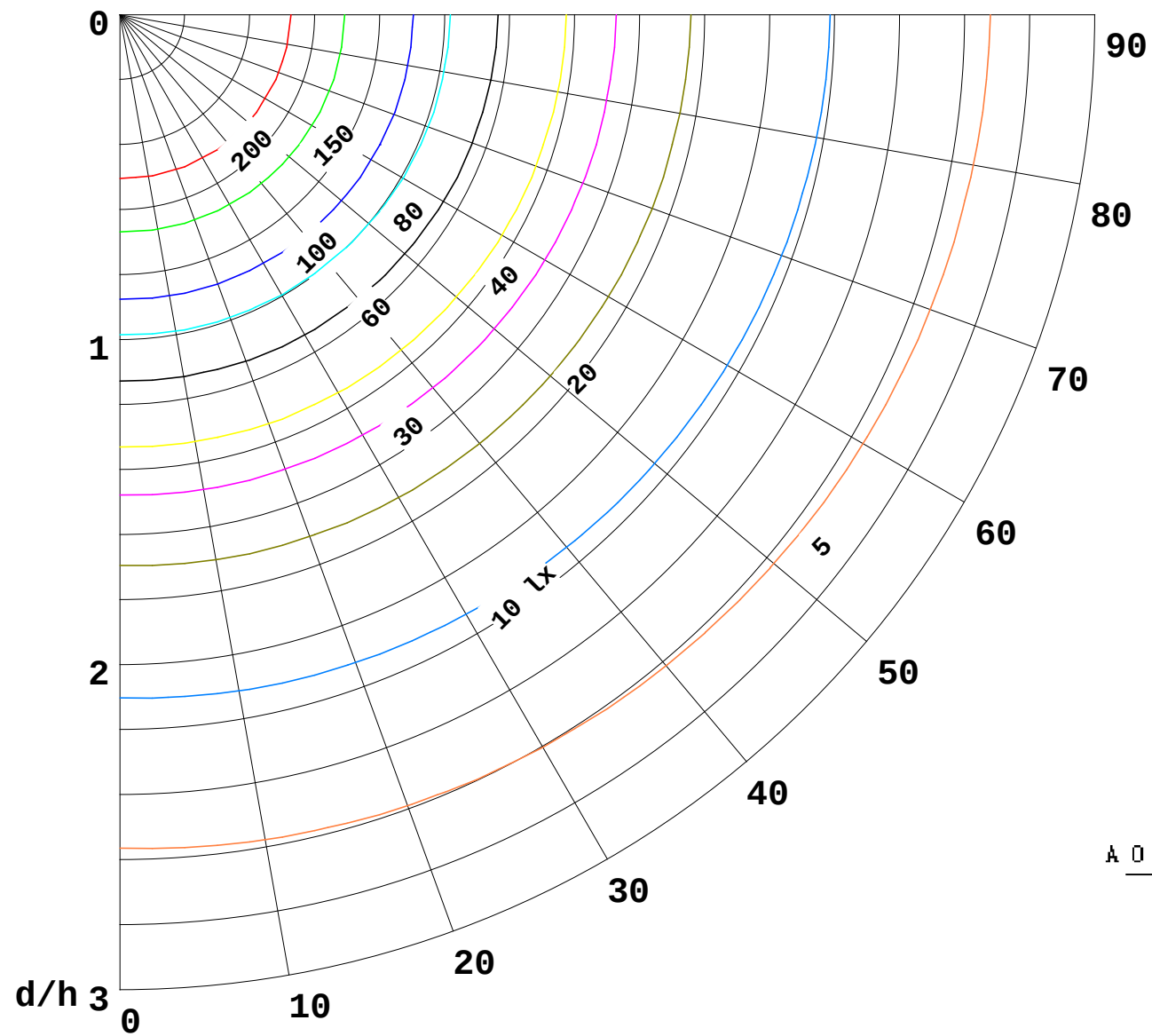
C Range: 0 - 360DEG
C Interval: 90.0DEG
Test Speed: HIGH
Temperature: 25.3DEG
Operators:
Test Date: 2024-03-20

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:



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

