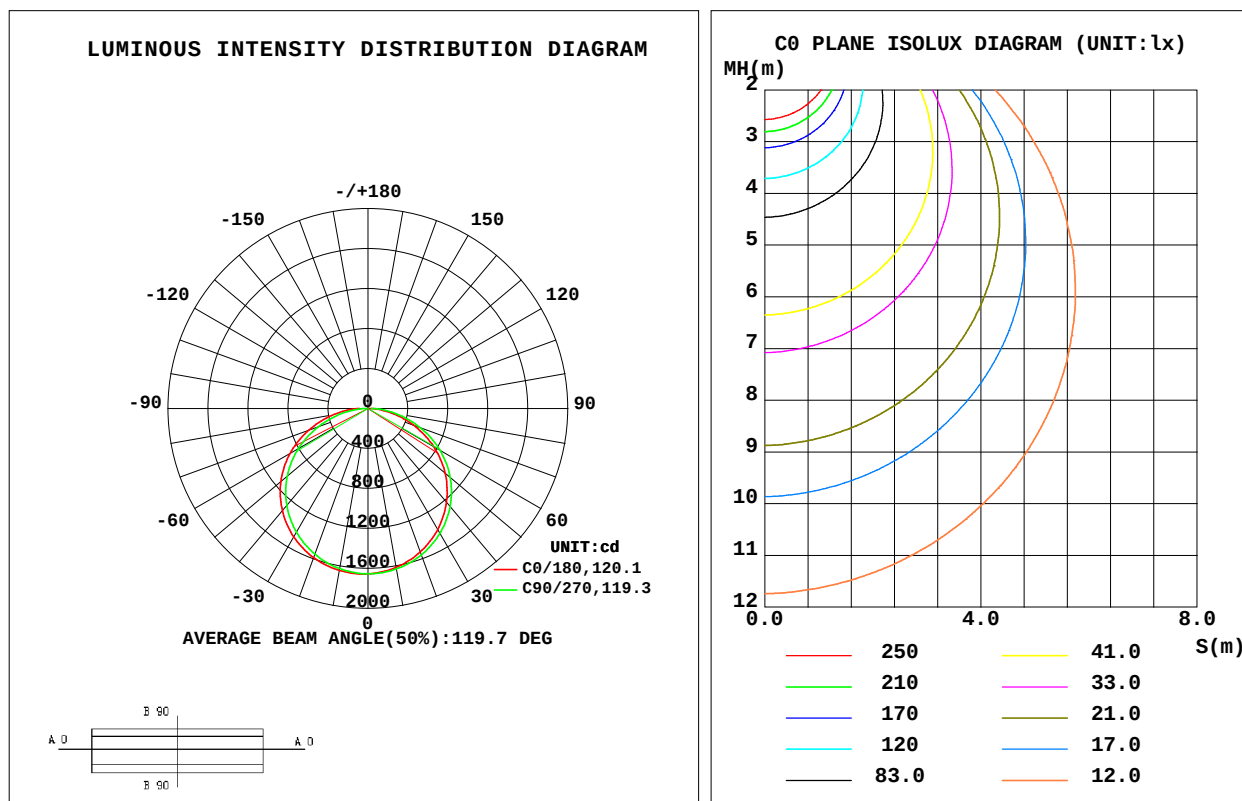


EVERFINE GONIOPHOTOMETERS SYSTEM TEST REPORT

LUMINAIRE PHOTOMETRIC TEST REPORT

Test:U:120.32V I:0.3192A P:38.225W PF:0.9954 Freq:59.98Hz Lamp Flux:5174.76x1 lm		
NAME:	TYPE:	WEIGHT:
SPEC.:100-277v	DIM.:	SERIAL No.:
MFR.:	SUR.:	Shielding Angle:

DATA OF LAMP		PHOTOMETRIC DATA Eff: 135.37 lm/W			
MODEL		I _{max} (cd)	1657	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)	5174.8	h UP, DN(C0-180)	0.0,48.6
NOMINAL FLUX(lm)	5174.76	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	1615	1631	1646	1628					0- 10	156.7	156.7	3.03, 3.03
20	1528	1560	1589	1553					10- 20	451.7	608.5	11.8, 11.8
30	1397	1442	1485	1431					20- 30	693.4	1302	25.2, 25.2
40	1222	1280	1334	1264					30- 40	852.6	2155	41.6, 41.6
50	1007	1076	1138	1056					40- 50	908.2	3063	59.2, 59.2
60	759.0	830.5	900.6	803.6					50- 60	849.5	3912	75.6, 75.6
70	483.7	552.4	629.0	520.8					60- 70	679.5	4592	88.7, 88.7
80	214.2	268.2	341.5	238.1					70- 80	427.0	5019	97, 97
90	2.281	37.21	84.16	17.31					80- 90	156.0	5175	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		

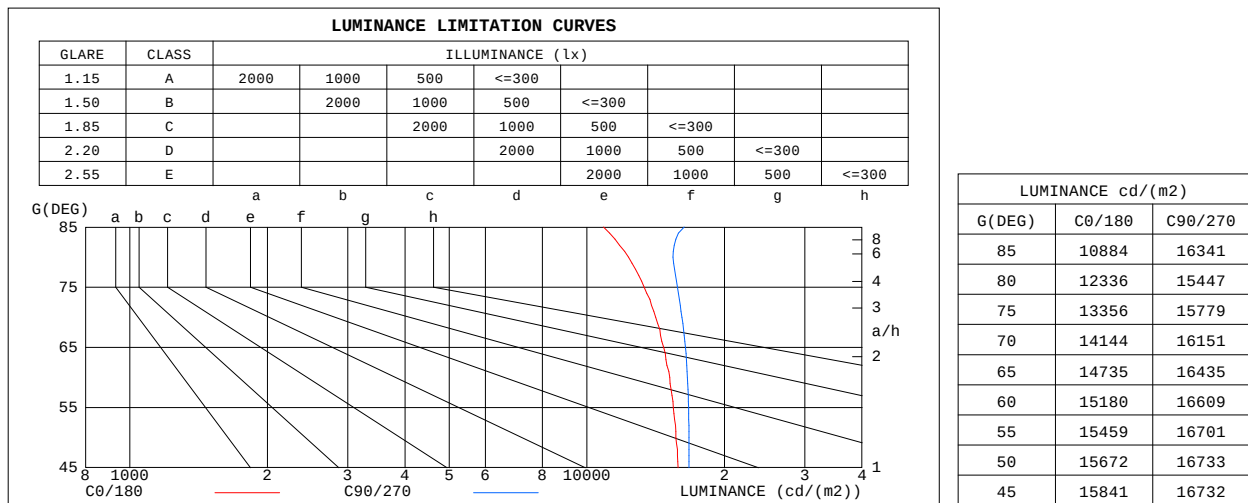
C Range: 0 - 360DEG
C Interval: 90.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:
Test Date:13 March 2024

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:0.3192A P:38.225W PF:0.9954 Freq:59.98Hz Lamp Flux:5174.76x1 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

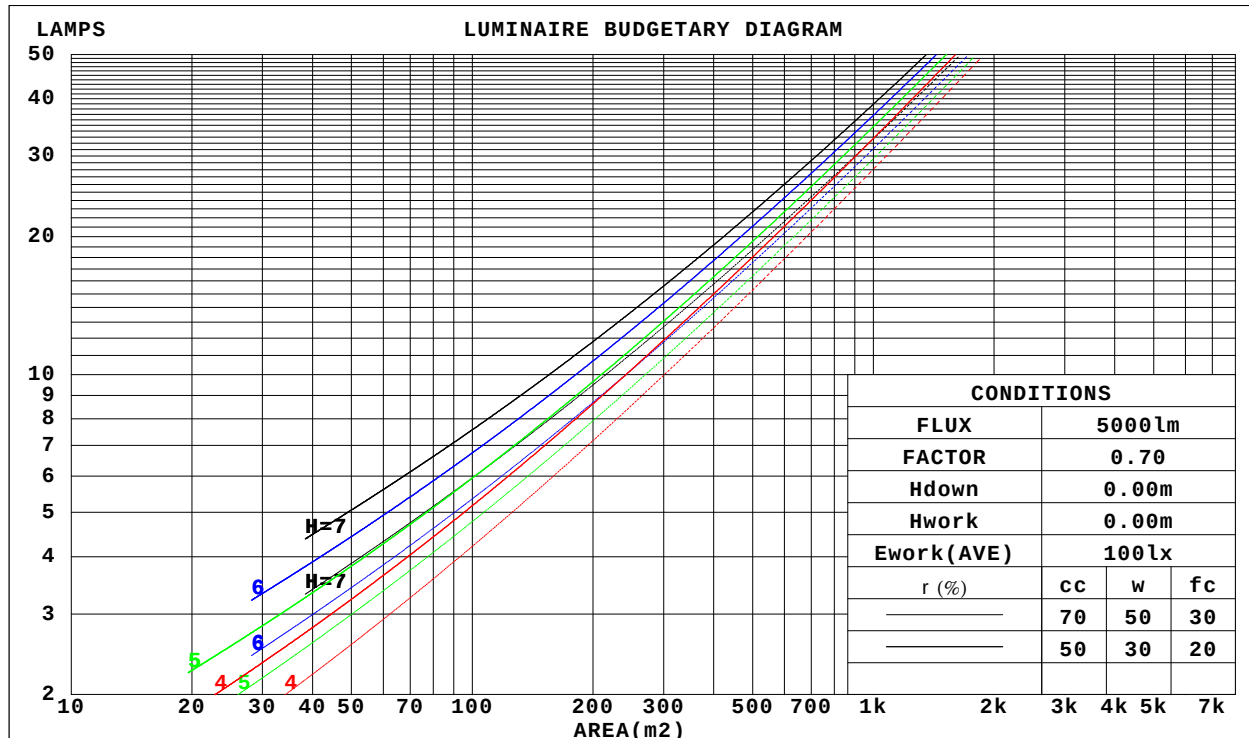
g Range: 0 - 90DEG
g Interval: 1.0DEG
Test System: EVERFINE G0-2000B_V1 SYSTEM V2.0.400
Humidity: 65.0%
Test Distance: 8.300m [K=1.0723]
Remarks:

EVERFINE GONIOPHOTOMETERS SYSTEM TEST REPORT

CU AND LUMINAIRE BUDGETARY ESTIMATE DIAGRAM

Test:U:120.32V I:0.3192A P:38.225W PF:0.9954 Freq:59.98Hz Lamp Flux:5174.76x1 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	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:0.3192A P:38.225W PF:0.9954 Freq:59.98Hz Lamp Flux:5174.76x1 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	.331	.188	.060	.324	.185	.059	.311	.178	.057	.298	.172	.055	.287	.166	.054	
2.0	.306	.168	.051	.300	.165	.051	.288	.160	.050	.277	.156	.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	.038	
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:0.3192A P:38.225W PF:0.9954 Freq:59.98Hz Lamp Flux:5174.76x1 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	22.3	23.9	22.6	24.1	24.3	22.6	24.2	22.9	24.4	24.6
	3H	23.9	25.3	24.2	25.6	25.8	24.4	25.8	24.7	26.0	26.3
	4H	24.5	25.9	24.9	26.2	26.4	25.1	26.5	25.4	26.7	27.0
	6H	25.0	26.3	25.4	26.6	26.9	25.7	27.0	26.0	27.3	27.6
	8H	25.2	26.4	25.5	26.7	27.0	25.9	27.2	26.3	27.5	27.8
	12H	25.3	26.5	25.6	26.8	27.1	26.1	27.3	26.5	27.6	27.9
4H	2H	23.0	24.4	23.3	24.6	24.9	23.3	24.6	23.6	24.9	25.2
	3H	24.8	26.0	25.1	26.3	26.6	25.2	26.4	25.5	26.7	27.0
	4H	25.6	26.7	25.9	27.0	27.3	26.0	27.1	26.4	27.5	27.8
	6H	26.2	27.2	26.6	27.5	27.9	26.8	27.8	27.2	28.1	28.5
	8H	26.4	27.3	26.8	27.7	28.1	27.1	28.0	27.5	28.4	28.8
	12H	26.5	27.4	27.0	27.8	28.2	27.3	28.2	27.7	28.6	29.0
8H	4H	25.9	26.8	26.3	27.2	27.6	26.3	27.2	26.7	27.6	28.0
	6H	26.7	27.5	27.1	27.9	28.3	27.2	28.0	27.7	28.4	28.8
	8H	27.0	27.7	27.5	28.1	28.6	27.6	28.3	28.1	28.7	29.2
	12H	27.2	27.8	27.7	28.3	28.8	28.0	28.6	28.5	29.0	29.5
12H	4H	25.9	26.8	26.4	27.2	27.6	26.3	27.2	26.8	27.6	28.0
	6H	26.8	27.5	27.2	27.9	28.4	27.3	28.0	27.8	28.4	28.9
	8H	27.2	27.7	27.6	28.2	28.7	27.7	28.3	28.2	28.8	29.3
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, 5175 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: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:0.3192A P:38.225W PF:0.9954 Freq:59.98Hz Lamp Flux:5174.76x1 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	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		

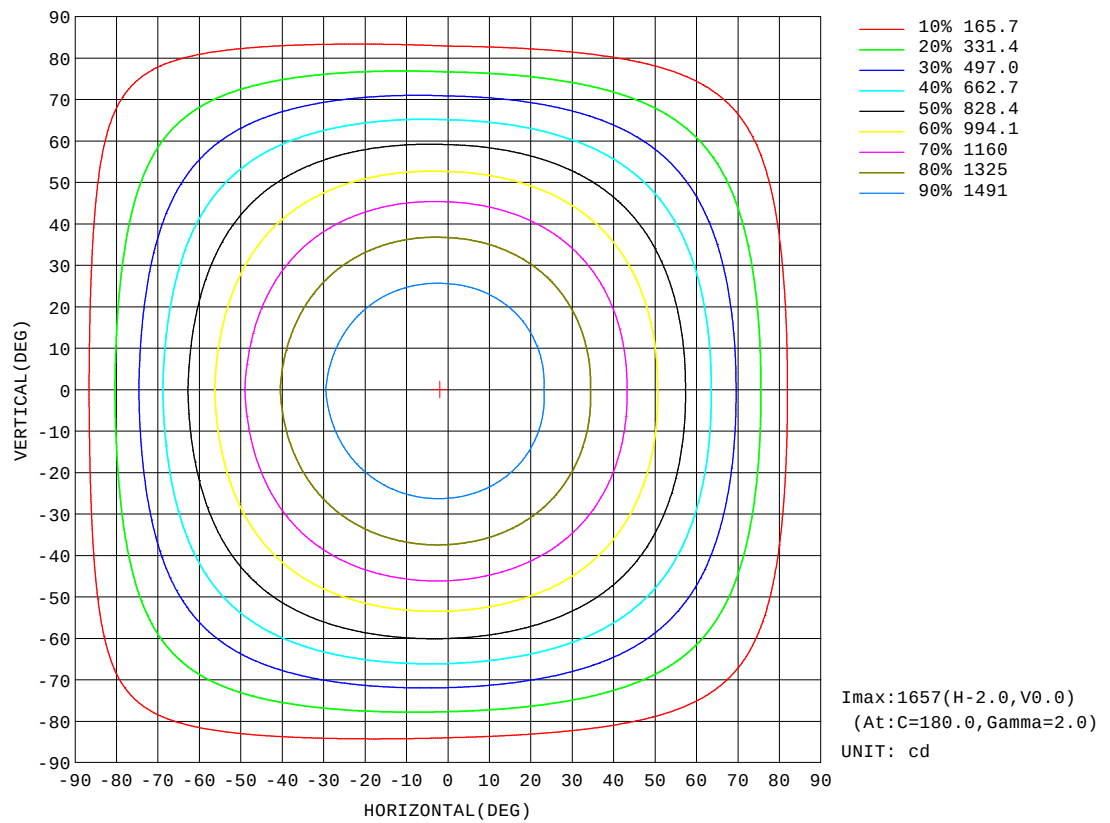
C Range: 0 - 360DEG
 C Interval: 90.0DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:
 Test Date:13 March 2024

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:0.3192A P:38.225W PF:0.9954 Freq:59.98Hz Lamp Flux:5174.76x1 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

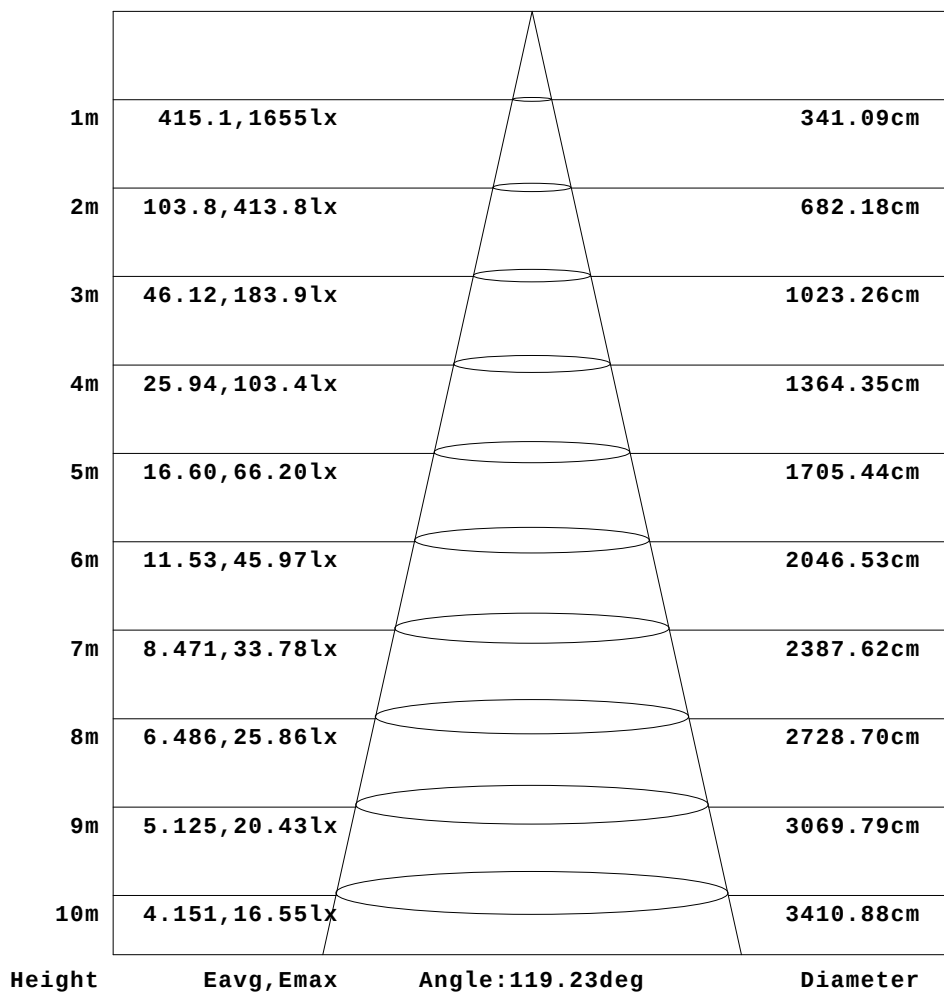
g Range: 0 - 90DEG
g Interval: 1.0DEG
Test System:EVERFINE G0-2000B_V1 SYSTEM V2.0.400
Humidity:65.0%
Test Distance:8.300m [K=1.0723]
Remarks:

EVERFINE GONIOPHOTOMETERS SYSTEM TEST REPORT

AAI Figure

Test:U:120.32V I:0.3192A P:38.225W PF:0.9954 Freq:59.98Hz Lamp Flux:5174.76x1 lm		
NAME:	TYPE:	WEIGHT:
SPEC.:100-277v	DIM.:	SERIAL No.:
MFR.:	SUR.:	Shielding Angle:

Flux out:3912 lm



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

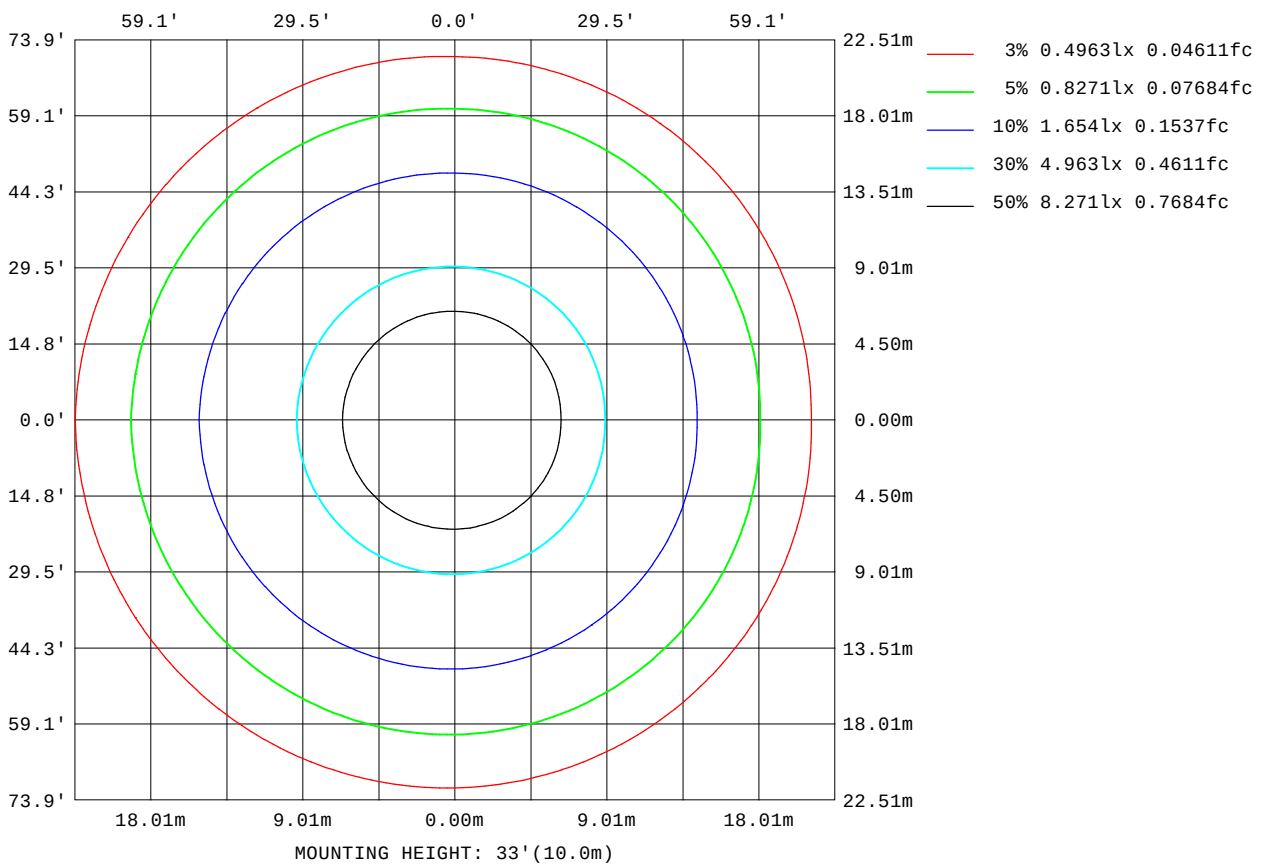
C Range: 0 - 360DEG
C Interval: 90.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:
Test Date:13 March 2024

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:120.32V I:0.3192A P:38.225W PF:0.9954 Freq:59.98Hz Lamp Flux:5174.76x1 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:120.32V I:0.3192A P:38.225W PF:0.9954 Freq:59.98Hz Lamp Flux:5174.76x1 lm		
NAME:	TYPE:	WEIGHT:
SPEC.:100-277v	DIM.:	SERIAL No.:
MFR.:	SUR.:	Shielding Angle:

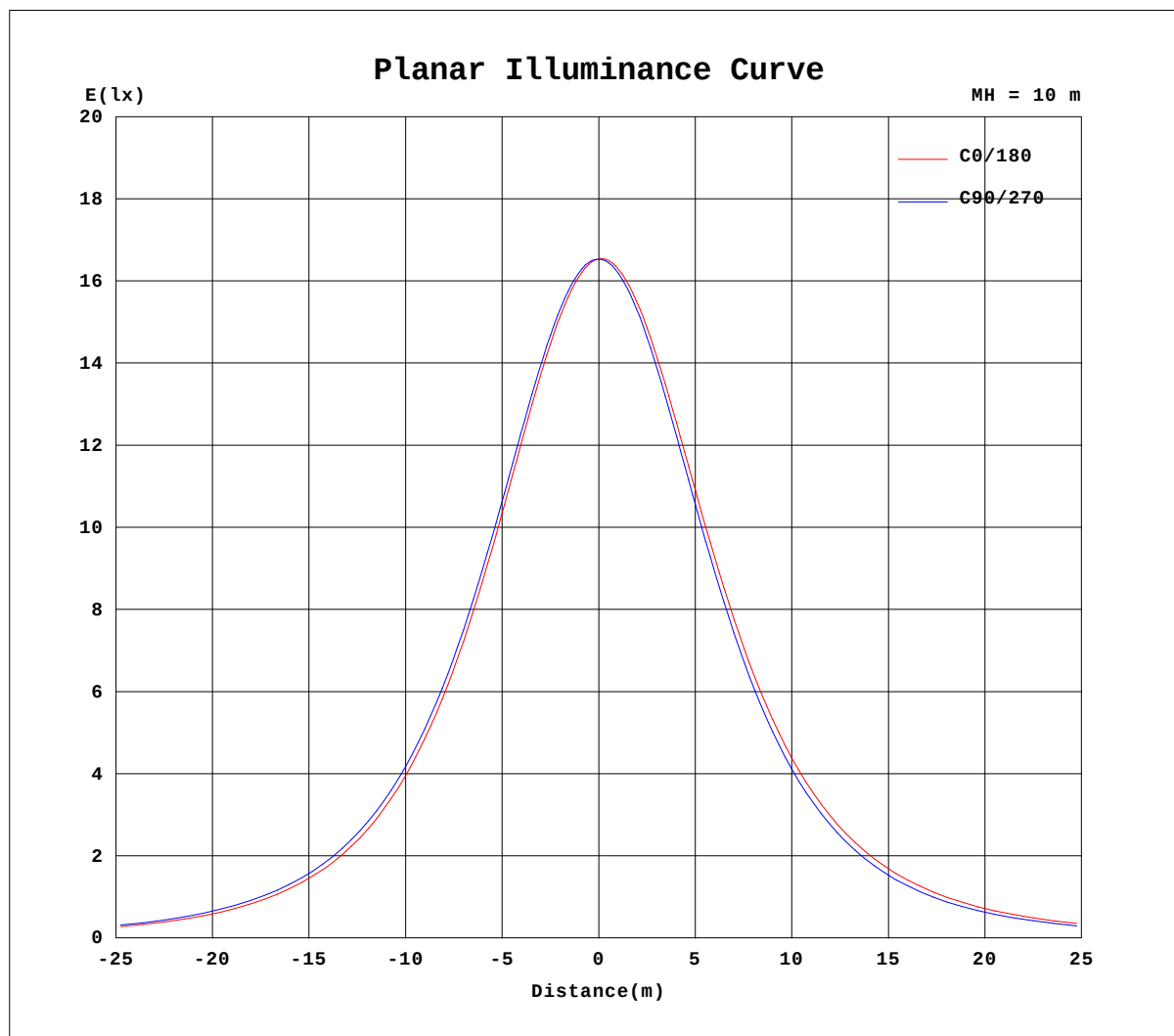
AvgL	cd/m2
L_0~180(65)av	16460
L_0~180(75)av	16050
L_0~180(85)av	17289
L_90~270(65)av	16078
L_90~270(75)av	15158
L_90~270(85)av	14742
L_45(65)av	16329
L_45(75)av	15661
L_45(85)av	16097

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:

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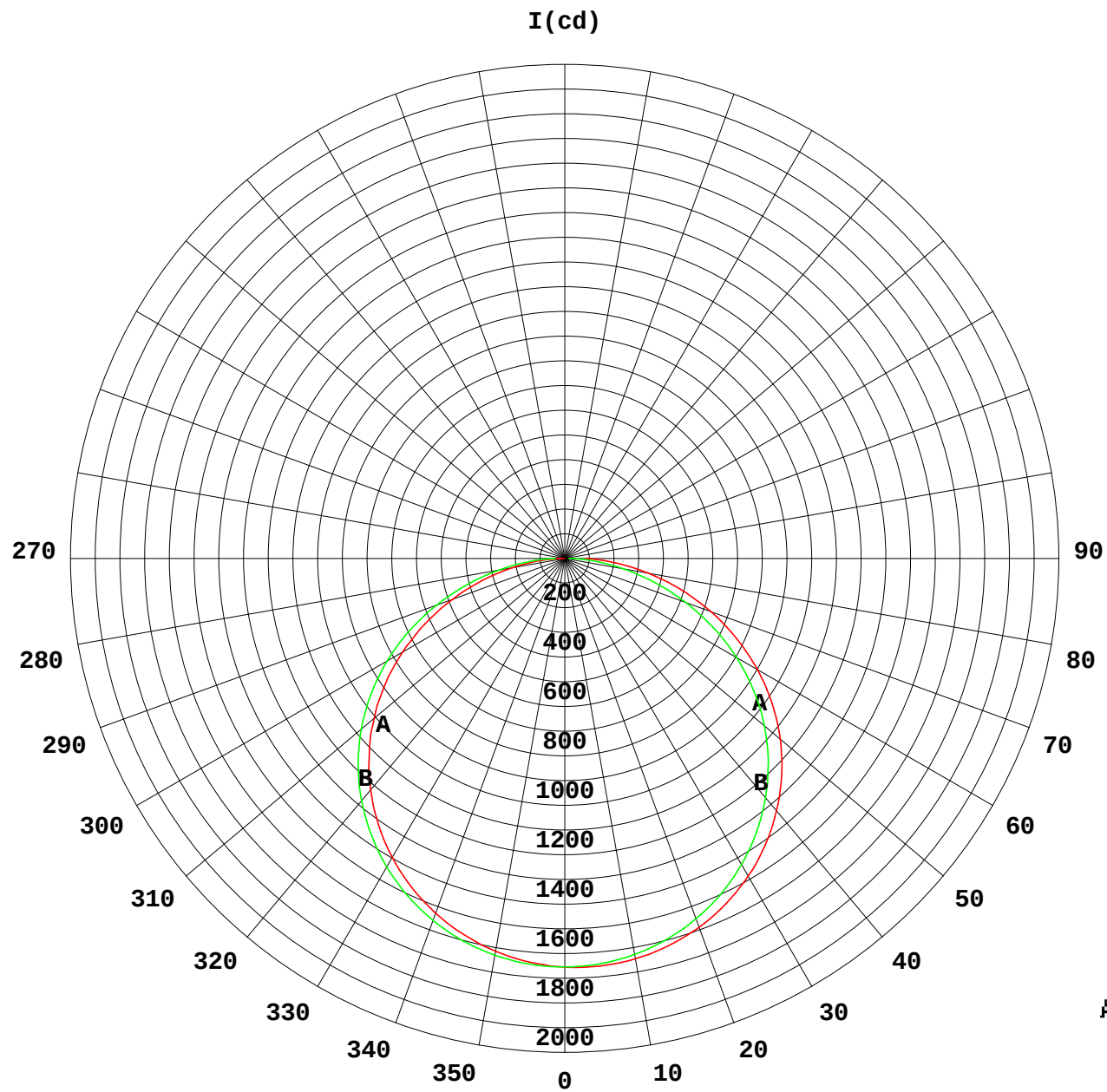
EVERFINE GONIOPHOTOMETERS SYSTEM TEST REPORT

Photometric Data Table [cd]

G/C	0.0	90.0	180.0	270.0
0.0	1654	1654	1654	1654
3.0	1647	1652	1657	1651
6.0	1636	1646	1655	1644
9.0	1620	1636	1649	1633
12.0	1602	1620	1638	1617
15.0	1577	1602	1623	1596
18.0	1549	1578	1604	1572
21.0	1517	1550	1581	1543
24.0	1481	1518	1553	1510
27.0	1441	1482	1521	1472
30.0	1397	1442	1485	1431
33.0	1350	1398	1445	1386
36.0	1298	1350	1400	1336
39.0	1242	1298	1350	1283
42.0	1184	1243	1298	1226
45.0	1120	1183	1242	1165
48.0	1056	1120	1180	1100
51.0	984.8	1053	1117	1032
54.0	911.7	981.9	1048	959.6
57.0	837.2	907.6	975.9	882.5
60.0	759.0	830.5	900.6	803.6
63.0	675.9	749.9	821.9	720.6
66.0	593.1	666.3	740.2	635.8
69.0	511.9	581.4	657.2	549.8
72.0	428.0	494.7	571.3	462.5
75.0	345.7	408.4	485.1	376.3
78.0	265.9	323.3	400.0	292.3
81.0	189.2	241.9	313.9	212.3
84.0	117.2	165.9	232.6	137.5
87.0	53.05	97.69	156.3	71.80
90.0	2.281	37.21	84.16	17.31

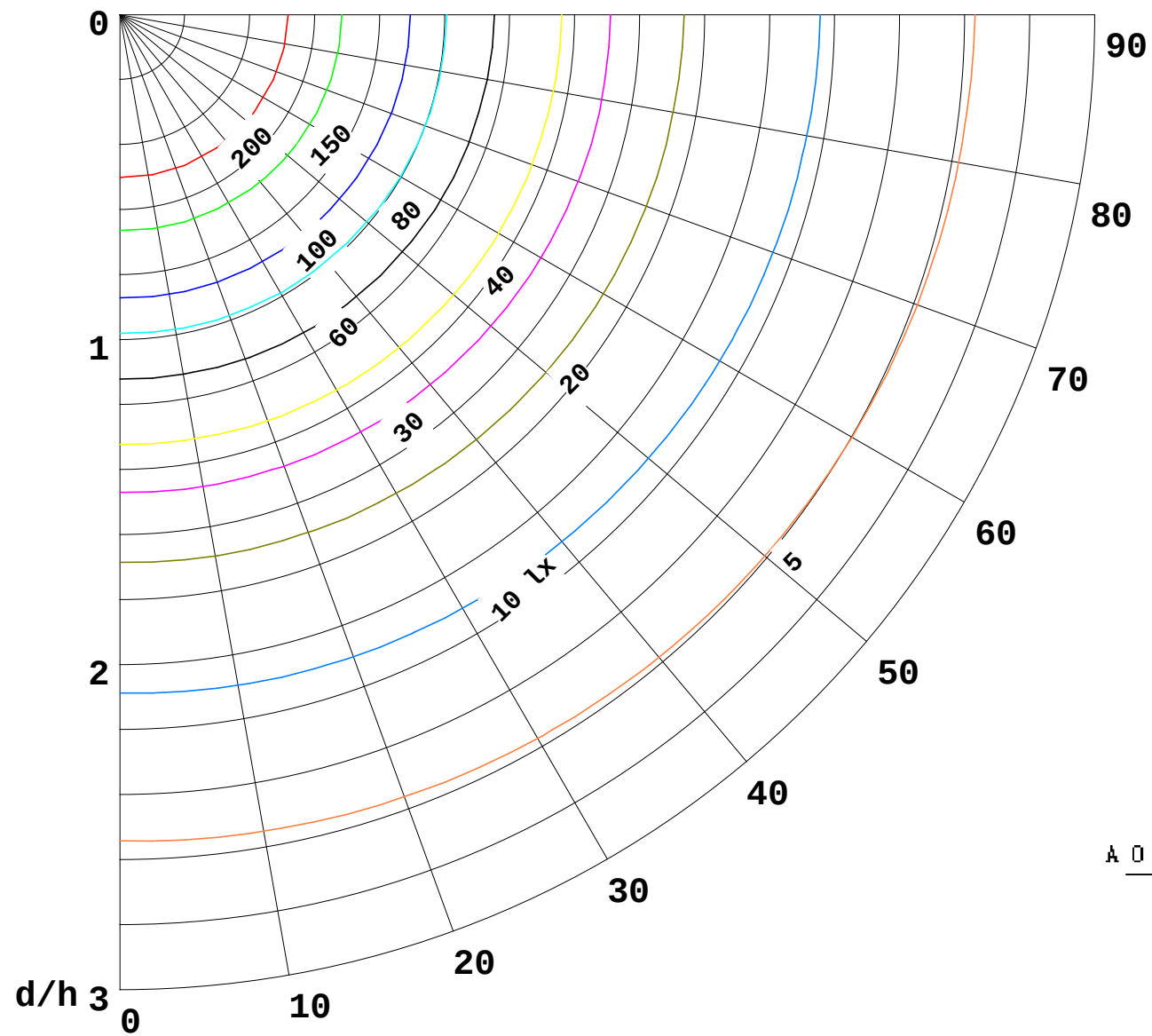
C Range: 0 - 360DEG
C Interval: 90.0DEG
Test Speed: HIGH
Temperature: 25.3DEG
Operators:
Test Date: 13 March 2024

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

