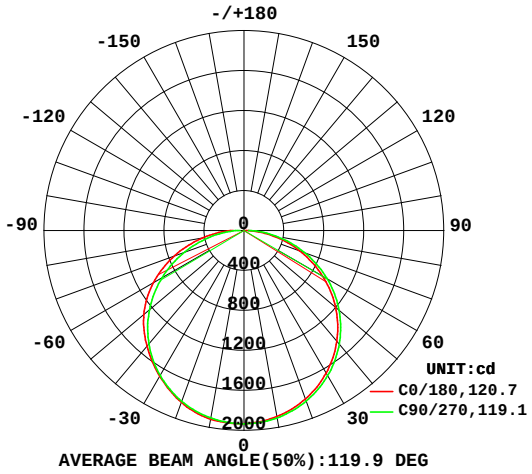
EVERFINE GONIOPHOTOMETERS SYSTEM TEST REPORT

LUMINAIRE PHOTOMETRIC TEST REPORT

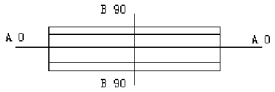
Test:U:120.22V I:0.3996A P:47.829W PF:0.9956 Freq:59.98Hz Lamp Flux:6073.24x1 lm		
NAME:	TYPE:	WEIGHT:
SPEC.:50w 6500k	DIM.:	SERIAL No.:
MFR.:	SUR.:	Shielding Angle:

DATA OF LAMP		PHOTOMETRIC DATA Eff: 126.98 lm/W			
MODEL		Imax(cd)	1934	S/MH(C0/180)	1.30
NOMINAL POWER(W)	50w	LOR(%)	100.0	S/MH(C90/270)	1.29
RATED VOLTAGE(V)	120-277v	TOTAL FLUX(lm)	6073.2	h UP,DN(C0-180)	0.0,48.7
NOMINAL FLUX(lm)	6073.24	CIE CLASS	DIRECT	h UP,DN(C180-360)	0.0,51.3
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

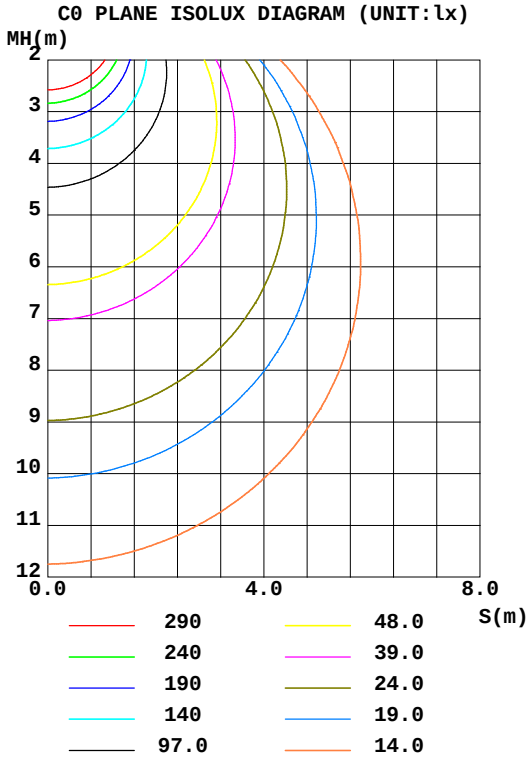
LUMINOUS INTENSITY DISTRIBUTION DIAGRAM



AVERAGE BEAM ANGLE(50%):119.9 DEG



C0 PLANE ISOLUX DIAGRAM (UNIT:lx)



C Range: 0 - 360DEG
C Interval: 90.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:赢
Test Date:2024-03-30

α Range: 0 - 90DEG
α Interval: 1.0DEG
Test System:EVERFINE GO-2000B_V1 SYSTEM V2.0.400
Humidity:65.0%
Test Distance:8.300m [K=1.0000]
Remarks:

ZONAL FLUX DIAGRAM

ZONAL FLUX DIAGRAM:

g	C0	C90	C180	C270					g	F zone	F total	%lum,lamp
10	1890	1904	1917	1904					0- 10	183.1	183.1	3.02,3.02
20	1795	1818	1832	1819					10- 20	527.3	710.5	11.7,11.7
30	1646	1676	1685	1677					20- 30	806.8	1517	25,25
40	1445	1484	1511	1481					30- 40	989.8	2507	41.3,41.3
50	1196	1244	1309	1236					40- 50	1056	3563	58.7,58.7
60	908.9	959.7	1047	947.7					50- 60	992.8	4556	75,75
70	590.1	643.2	738.0	630.9					60- 70	801.4	5357	88.2,88.2
80	270.9	322.4	412.8	312.8					70- 80	516.1	5873	96.7,96.7
90	3.732	47.19	108.0	40.80					80- 90	199.9	6073	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:赢
Test Date:2024-03-30

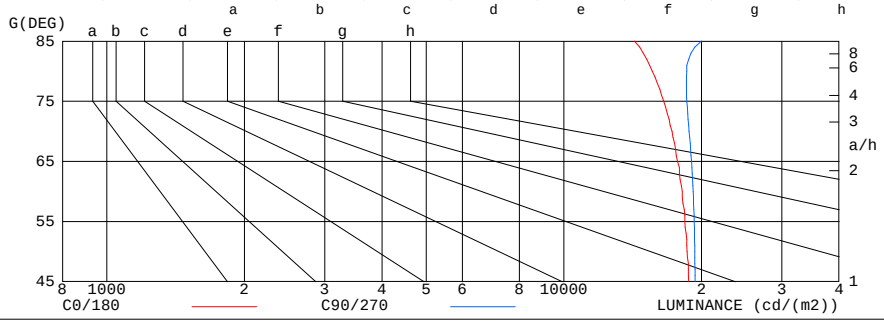
g Range: 0 - 90DEG
g Interval: 1.0DEG
Test System:EVERFINE GO-2000B_V1 SYSTEM V2.0.400
Humidity:65.0%
Test Distance:8.300m [K=1.0000]
Remarks:

LUMINANCE LIMITATION CURVES

Test:U:120.22V I:0.3996A P:47.829W PF:0.9956 Freq:59.98Hz Lamp Flux:6073.24x1 lm		
NAME:	**TYPE:**	**WEIGHT:**
SPEC.:50w 6500k	**DIM.:**	**SERIAL No.:**
MFR.:	**SUR.:**	**Shielding Angle:**

LUMINANCE LIMITATION CURVES

GLARE	CLASS	ILLUMINANCE (lx)							
1.15	A	2000	1000	500	<=300				
1.50	B		2000	1000	500	<=300			
1.85	C			2000	1000	500	<=300		
2.20	D				2000	1000	500	<=300	
2.55	E					2000	1000	500	<=300
		a	b	c	d	e	f	g	h



LUMINANCE cd/(m2)		
G(DEG)	C0/180	C90/270
85	14260	20007
80	15601	18566
75	16542	18569
70	17255	18807
65	17742	19031
60	18178	19194
55	18410	19295
50	18609	19354
45	18759	19368

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Test System:EVERFINE GO-2000B_V1 SYSTEM V2.0.400
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Test Distance:8.300m [K=1.0000]
Remarks:

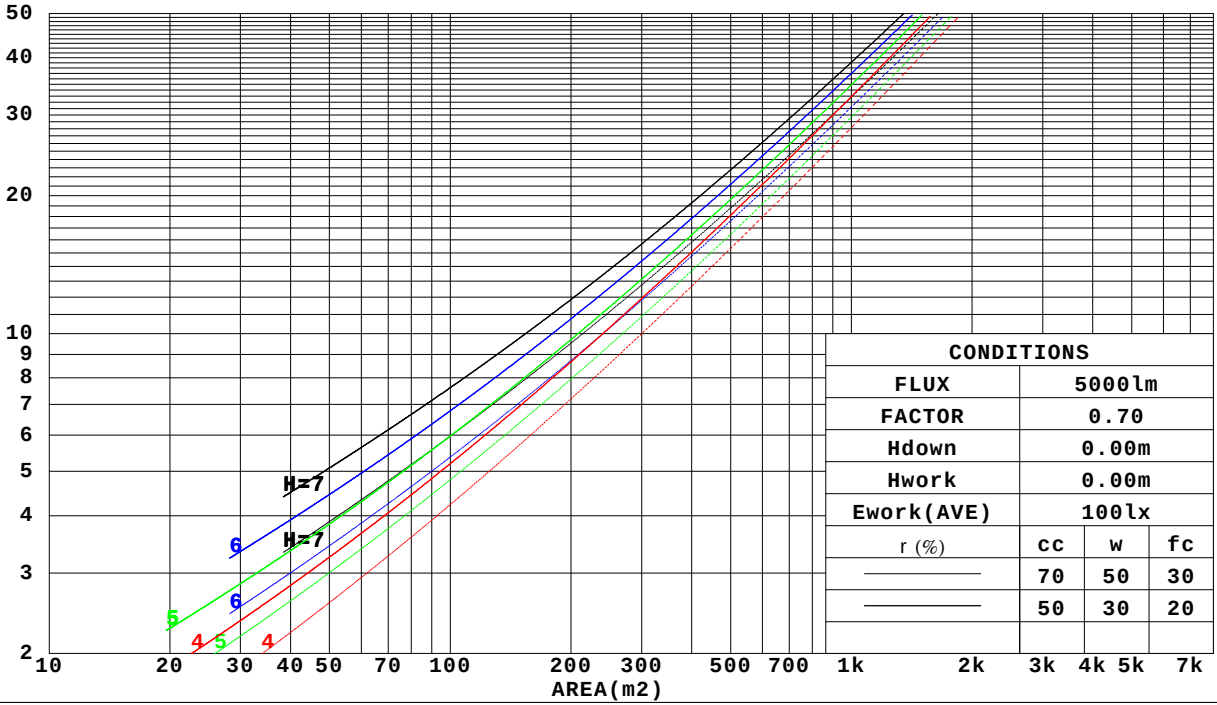
CU AND LUMINAIRE BUDGETARY ESTIMATE DIAGRAM

Test:U:120.22V I:0.3996A P:47.829W PF:0.9956 Freq:59.98Hz Lamp Flux:6073.24x1 lm		
NAME:	TYPE:	WEIGHT:
SPEC.:50w 6500k	DIM.:	SERIAL No.:
MFR.:	SUR.:	Shielding Angle:

ρcc	80%			70%			50%			30%			10%			0
ρw	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	0
ρfc	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	.92	.89	.92	.89	.86	.88	.86	.84	.82
2.0	.89	.81	.75	.87	.80	.74	.83	.77	.73	.80	.75	.71	.77	.73	.69	.67
3.0	.77	.69	.62	.76	.68	.61	.73	.66	.60	.70	.64	.59	.67	.62	.58	.56
4.0	.68	.59	.52	.67	.58	.52	.64	.57	.51	.62	.55	.50	.60	.54	.50	.47
5.0	.61	.51	.45	.60	.51	.44	.57	.50	.44	.55	.49	.43	.54	.48	.43	.41
6.0	.55	.45	.39	.54	.45	.39	.52	.44	.38	.50	.43	.38	.48	.42	.37	.35
7.0	.49	.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	.40	.34	.30	.28
9.0	.41	.33	.27	.41	.33	.27	.39	.32	.27	.38	.32	.27	.37	.31	.27	.25
10.0	.38	.30	.25	.37	.30	.24	.36	.29	.24	.36	.29	.24	.35	.29	.24	.22

LAMPS

LUMINAIRE BUDGETARY DIAGRAM



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C Interval: 90.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:贏
Test Date:2024-03-30

γ Range: 0 - 90DEG
γ Interval: 1.0DEG
Test System:EVERFINE GO-2000B_V1 SYSTEM V2.0.400
Humidity:65.0%
Test Distance:8.300m [K=1.0000]
Remarks:

WEC AND CCEC

Test:U:120.22V I:0.3996A P:47.829W PF:0.9956 Freq:59.98Hz Lamp Flux:6073.24x1 lm		
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SPEC.:50w 6500k	DIM.:	SERIAL No.:
MFR.:	SUR.:	Shielding Angle:

ρcc	80%			70%			50%			30%			10%			0
ρw	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	0
ρfc	20%			20%			20%			20%			20%			0
RCR	RCR:Room Cavity Ratio						Wall Exitance Coeffcients(WEC)									
0.0																
1.0	.335	.191	.060	.328	.187	.059	.315	.181	.058	.302	.174	.056	.291	.169	.054	
2.0	.309	.169	.052	.303	.167	.051	.291	.162	.050	.280	.157	.049	.270	.153	.048	
3.0	.283	.150	.045	.277	.148	.045	.266	.144	.044	.257	.141	.043	.248	.137	.042	
4.0	.259	.134	.040	.254	.133	.039	.244	.130	.039	.236	.127	.038	.228	.124	.038	
5.0	.238	.121	.035	.233	.120	.035	.225	.117	.035	.217	.115	.034	.210	.112	.034	
6.0	.220	.110	.032	.216	.109	.031	.208	.107	.031	.202	.105	.031	.195	.103	.030	
7.0	.204	.101	.029	.200	.100	.028	.194	.098	.028	.188	.096	.028	.182	.094	.028	
8.0	.190	.093	.026	.187	.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	.167	.080	.022	.164	.079	.022	.159	.078	.022	.155	.077	.022	.151	.076	.022	

ρcc	80%			70%			50%			30%			10%			0
ρw	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	0
ρfc	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	.132	.156	.134	.114	.107	.092	.079	.061	.053	.046	.020	.017	.015	
2.0	.175	.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	.137	.087	.049	.094	.061	.035	.054	.036	.021	.017	.012	.007	
5.0	.152	.091	.046	.130	.079	.040	.090	.055	.028	.052	.032	.017	.017	.011	.006	
6.0	.144	.083	.038	.124	.072	.033	.086	.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	.119	.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:赢
Test Date:2024-03-30

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=1.0000]
Remarks:

UGR(Unified Glare Rating) Table

Test:U:120.22V I:0.3996A P:47.829W PF:0.9956 Freq:59.98Hz Lamp Flux:6073.24x1 lm		
NAME:	TYPE:	WEIGHT:
SPEC.:50w 6500k	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	22.9	24.5	23.2	24.7	24.9	23.1	24.7	23.4	24.9	25.1
	3H	24.6	26.0	24.9	26.3	26.5	24.9	26.3	25.2	26.6	26.8
	4H	25.3	26.6	25.6	26.9	27.2	25.6	27.0	25.9	27.3	27.5
	6H	25.8	27.1	26.1	27.4	27.7	26.2	27.6	26.6	27.8	28.1
	8H	26.0	27.2	26.3	27.5	27.8	26.5	27.8	26.8	28.0	28.3
	12H	26.1	27.3	26.4	27.6	27.9	26.7	27.9	27.0	28.2	28.5
4H	2H	23.6	25.0	23.9	25.3	25.5	23.8	25.2	24.1	25.4	25.7
	3H	25.4	26.7	25.8	27.0	27.3	25.7	26.9	26.0	27.2	27.5
	4H	26.3	27.4	26.6	27.7	28.0	26.6	27.7	27.0	28.0	28.4
	6H	26.9	27.9	27.3	28.3	28.7	27.4	28.4	27.8	28.7	29.1
	8H	27.2	28.1	27.6	28.5	28.9	27.7	28.6	28.1	29.0	29.4
	12H	27.4	28.2	27.8	28.6	29.0	27.9	28.8	28.4	29.2	29.6
8H	4H	26.6	27.5	27.0	27.9	28.3	26.9	27.8	27.3	28.2	28.6
	6H	27.5	28.2	27.9	28.6	29.1	27.8	28.6	28.3	29.0	29.5
	8H	27.8	28.5	28.3	28.9	29.4	28.3	29.0	28.7	29.4	29.8
	12H	28.1	28.7	28.6	29.1	29.6	28.7	29.3	29.1	29.7	30.2
12H	4H	26.7	27.5	27.1	27.9	28.3	26.9	27.8	27.3	28.2	28.6
	6H	27.6	28.3	28.0	28.7	29.1	27.9	28.6	28.4	29.0	29.5
	8H	28.0	28.6	28.4	29.0	29.5	28.4	29.0	28.9	29.5	29.9
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 / - 0.3					+ 0.1 / - 0.3				

CIE Pub.117, 6073 lm Total Lamp Luminous Flux Corrected (8log(F/F0) = 6.3)

C Range: 0 - 360DEG
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Operators:赢
Test Date:2024-03-30

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=1.0000]
Remarks:

UTILIZATION FACTORS TABLE

Test:U:120.22V I:0.3996A P:47.829W PF:0.9956 Freq:59.98Hz Lamp Flux:6073.24x1 lm		
NAME:	TYPE:	WEIGHT:
SPEC.:50w 6500k	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) x RCR = 5									
k = 0.60	56	44	37	55	44	36	54	43	36	30
0.80	66	54	46	65	53	46	63	52	45	38
1.00	74	62	55	73	62	54	70	63	54	47
1.25	81	70	63	80	69	62	77	68	61	54
1.50	86	76	68	84	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	93	88	99	92	86	94	89	84	76
4.00	105	99	94	103	97	92	98	94	90	81
5.00	108	102	98	105	100	96	101	97	93	84
ROOM INDEX	UF(total)									Direct
According to DIN EN 13032-2 2004				Suspended					SHRNOM = 1.25	

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g Interval: 1.0DEG
Test System:EVERFINE GO-2000B_V1 SYSTEM V2.0.400
Humidity:65.0%
Test Distance:8.300m [K=1.0000]
Remarks:

ISOCANDELA DIAGRAM

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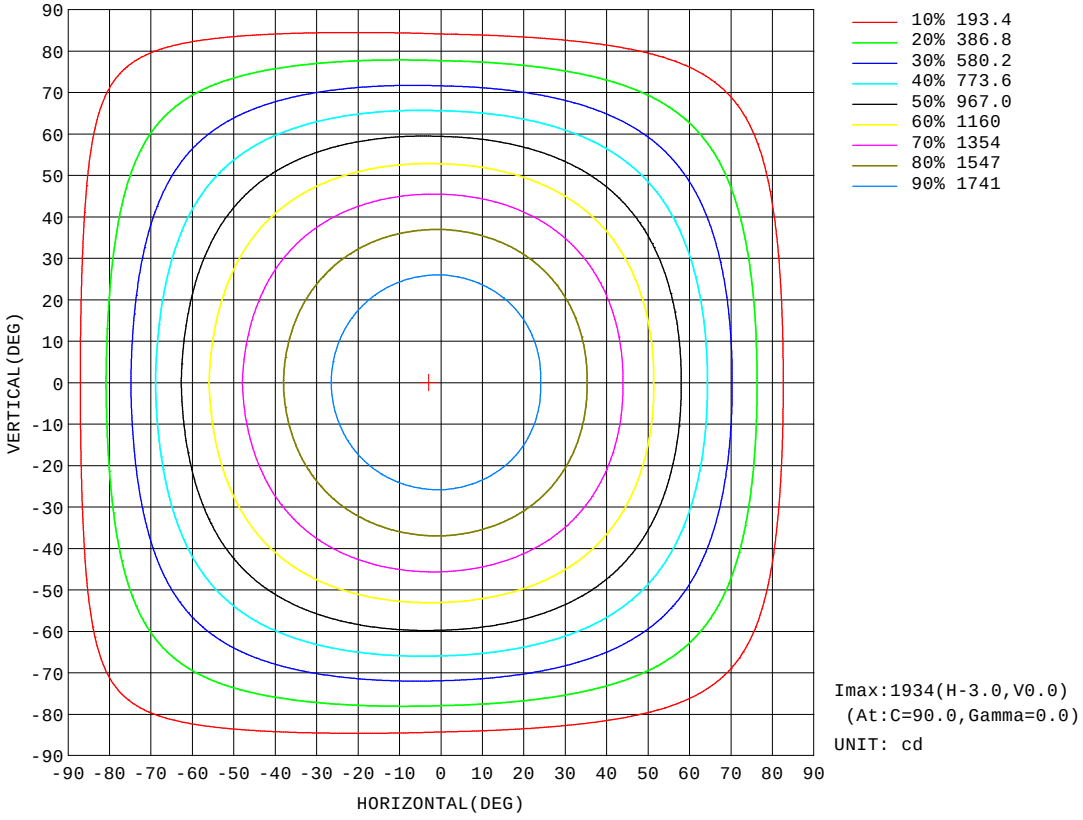

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g Range: 0 - 90DEG
g Interval: 1.0DEG
Test System:EVERFINE GO-2000B_V1 SYSTEM V2.0.400
Humidity:65.0%
Test Distance:8.300m [K=1.0000]
Remarks:

AAI Figure

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NAME:	TYPE:	WEIGHT:
SPEC.:50w 6500k	DIM.:	SERIAL No.:
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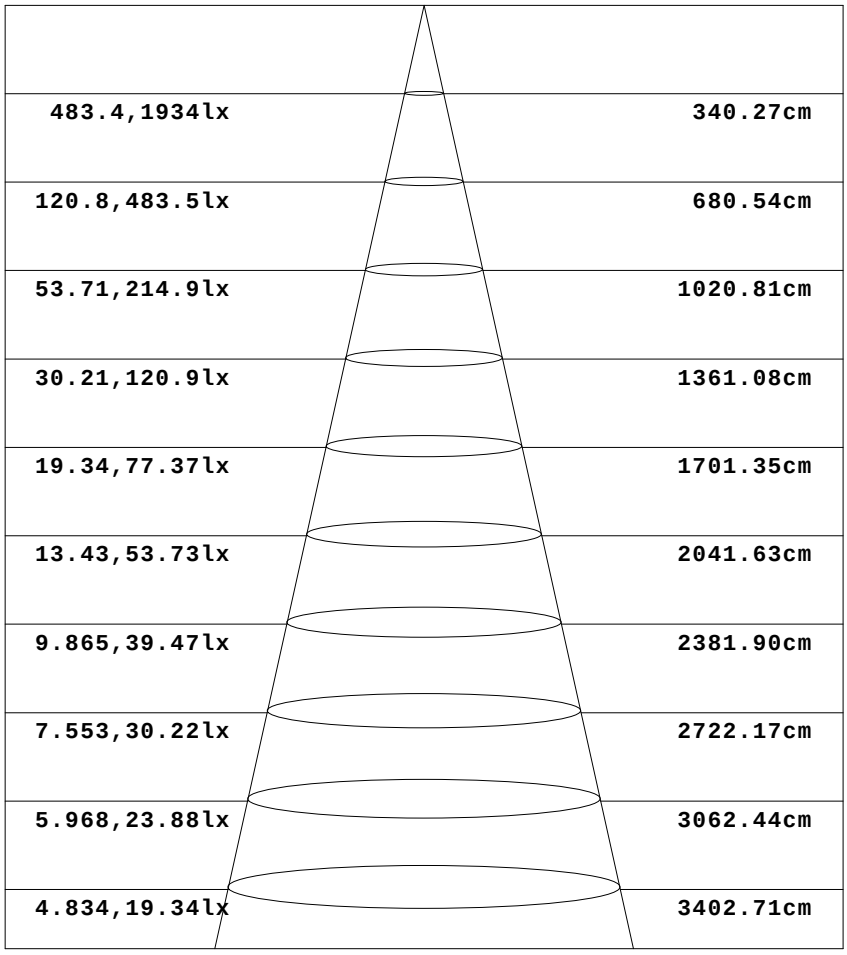
Flux out:4556 lm



Height Eavg,Emax Angle:119.11deg Diameter

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

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Remarks:

ISOLUX DIAGRAM

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SPEC.:50w 6500k	DIM.:	SERIAL No.:
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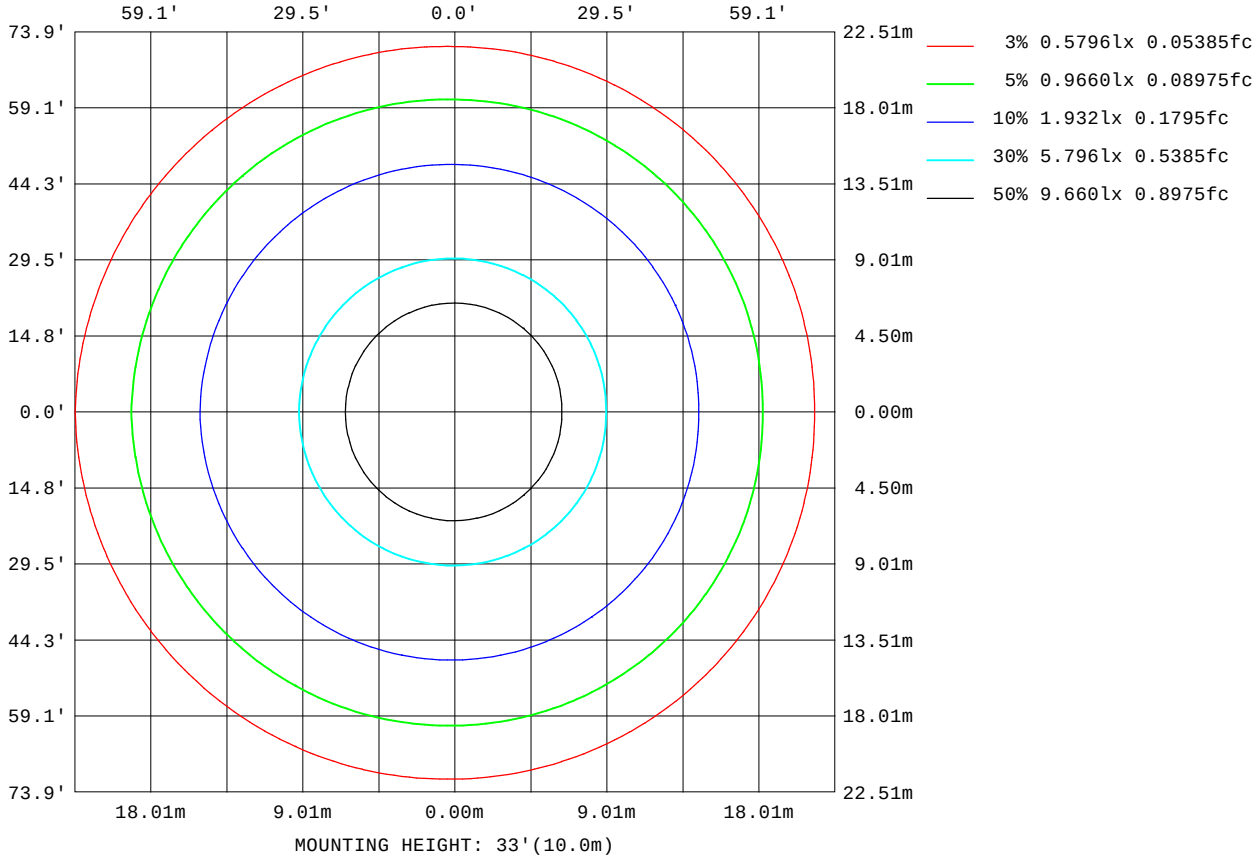

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Remarks:

LED Avg.L Report

Test:U:120.22V I:0.3996A P:47.829W PF:0.9956 Freq:59.98Hz Lamp Flux:6073.24x1 lm		
NAME:	TYPE:	WEIGHT:
SPEC.:50w 6500k	DIM.:	SERIAL No.:
MFR.:	SUR.:	Shielding Angle:

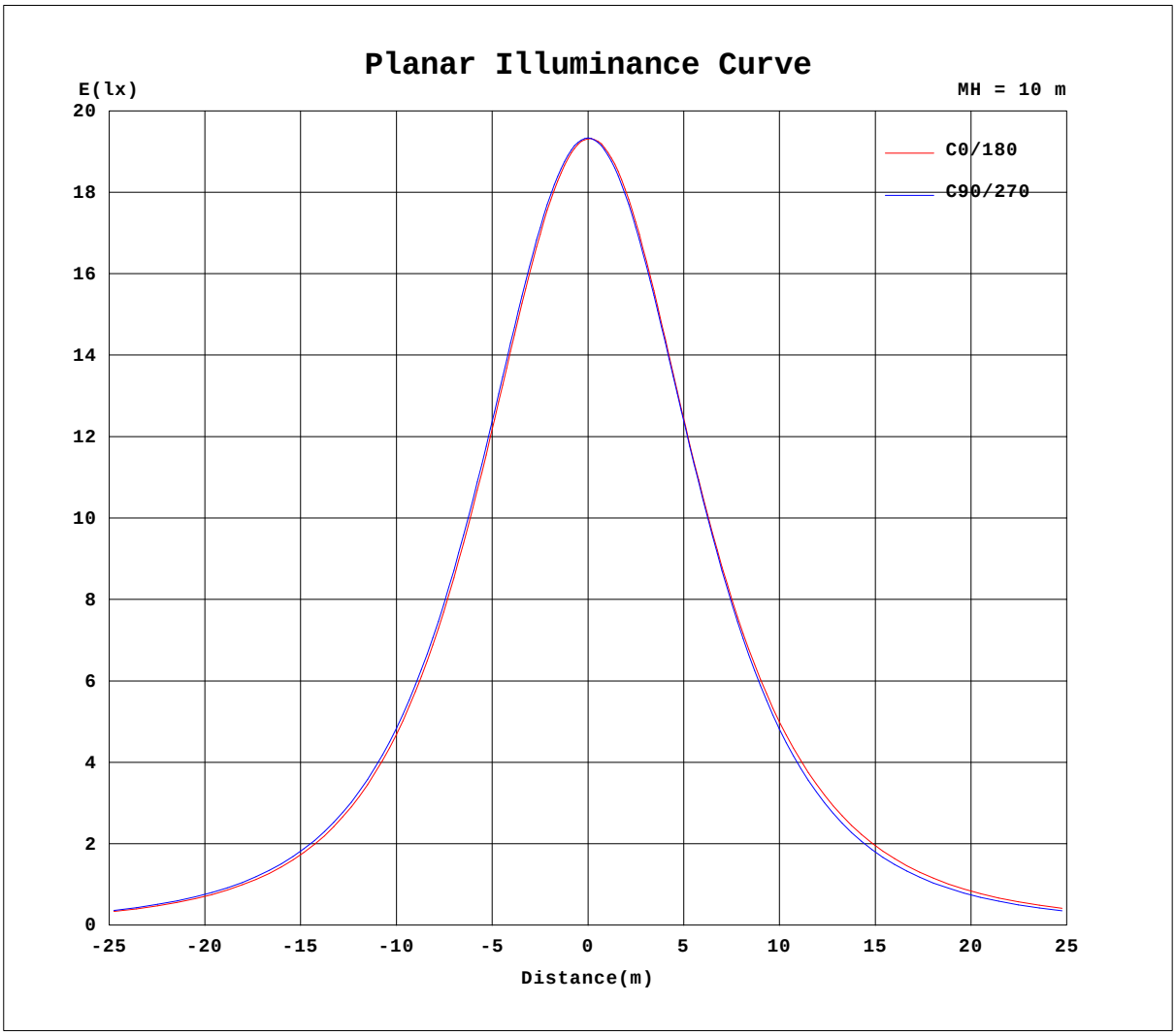
AvgL	cd/m2
L_0~180(65)av	19474
L_0~180(75)av	19376
L_0~180(85)av	21739
L_90~270(65)av	18873
L_90~270(75)av	18349
L_90~270(85)av	19613
L_45(65)av	19207
L_45(75)av	18911
L_45(85)av	20877

Standard: GB/T 29293-2012

C Range: 0 - 360DEG
C Interval: 90.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:赢
Test Date:2024-03-30

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=1.0000]
Remarks:

Planar Illuminance Curve



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Remarks:

LUMINOUS DISTRIBUTION INTENSITY DATA

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SPEC.:50w 6500k	DIM.:	SERIAL No.:
MFR.:	SUR.:	Shielding Angle:

Table--1 UNIT: cd

g (DEG) \ C(DEG)	0	90	180	270
0	1932	1934	1932	1934
5	1919	1926	1932	1926
10	1890	1904	1917	1904
15	1849	1868	1884	1869
20	1795	1818	1832	1819
25	1728	1754	1763	1755
30	1646	1676	1685	1677
35	1552	1586	1601	1585
40	1445	1484	1511	1481
45	1326	1370	1414	1364
50	1196	1244	1309	1236
55	1056	1107	1185	1097
60	909	960	1047	948
65	750	804	896	791
70	590	643	738	631
75	428	481	575	469
80	271	322	413	313
85	124	174	255	168
90	3.73	47.2	108	40.8

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g Interval: 1.0DEG
Test System:EVERFINE GO-2000B_V1 SYSTEM V2.0.400
Humidity:65.0%
Test Distance:8.300m [K=1.0000]
Remarks:

Photometric Data Table [cd]

G/C	0.0	90.0	180.0	270.0
0.0	1932	1934	1932	1934
3.0	1926	1930	1934	1931
6.0	1914	1923	1930	1923
9.0	1898	1909	1922	1910
12.0	1877	1891	1906	1892
15.0	1849	1868	1884	1869
18.0	1818	1839	1854	1841
21.0	1783	1806	1818	1807
24.0	1741	1768	1777	1769
27.0	1696	1725	1733	1725
30.0	1646	1676	1685	1677
33.0	1592	1625	1636	1624
36.0	1532	1568	1584	1565
39.0	1469	1506	1528	1502
42.0	1400	1440	1473	1435
45.0	1326	1370	1414	1364
48.0	1253	1295	1352	1287
51.0	1170	1217	1285	1209
54.0	1084	1135	1211	1126
57.0	998.9	1049	1131	1037
60.0	908.9	959.7	1047	947.7
63.0	812.3	866.8	957.5	854.3
66.0	716.2	772.2	864.7	759.1
69.0	621.4	676.0	770.1	663.3
72.0	525.1	578.3	673.0	565.8
75.0	428.2	480.6	574.8	469.2
78.0	333.2	385.6	478.0	375.0
81.0	241.0	290.8	381.0	282.9
84.0	153.1	202.1	285.3	195.4
87.0	71.43	120.7	195.2	113.7
90.0	3.732	47.19	108.0	40.80

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C Interval: 90.0DEG
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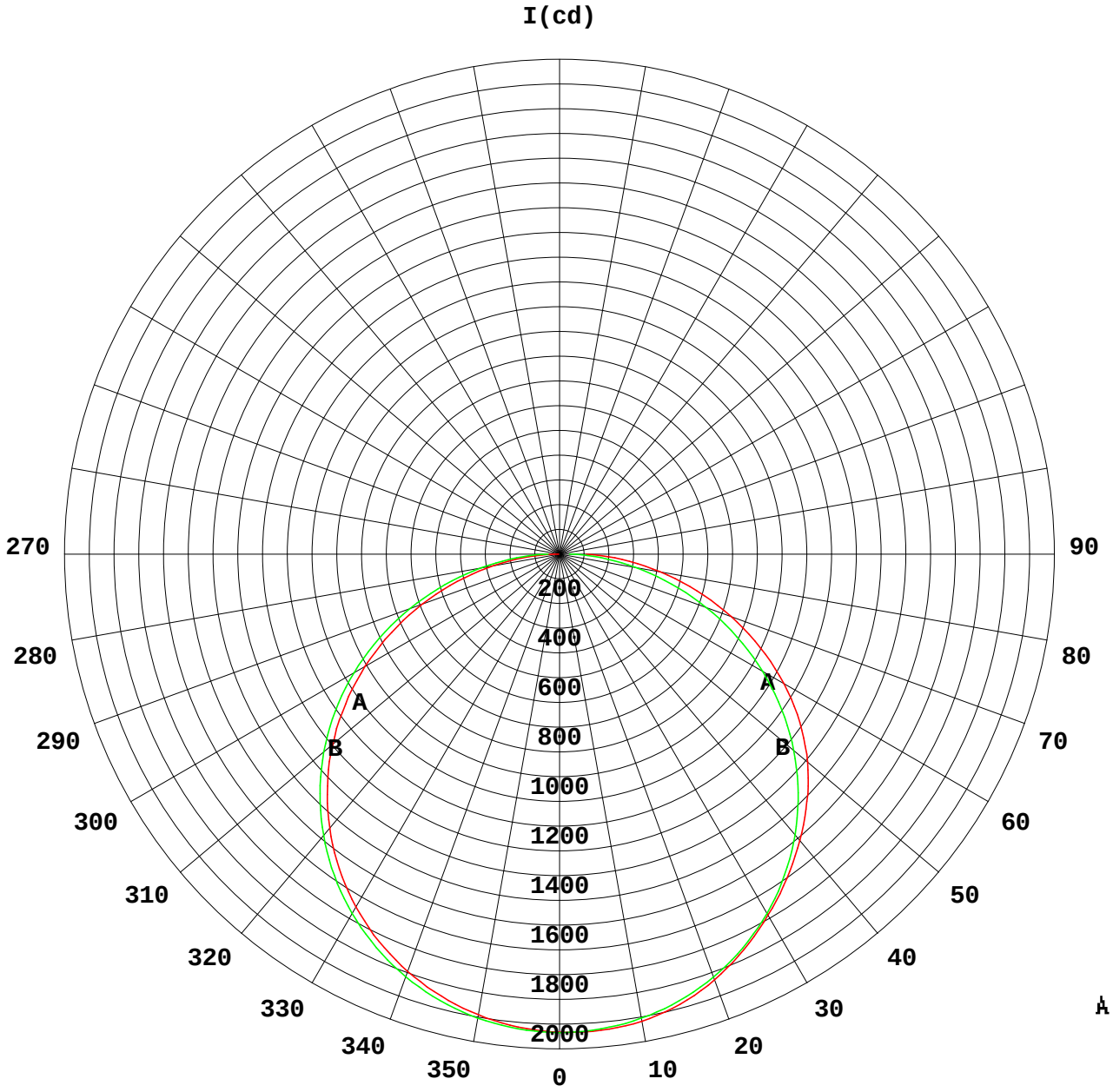
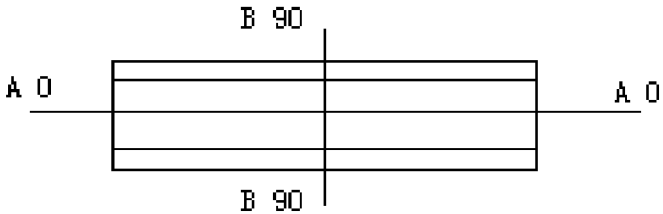
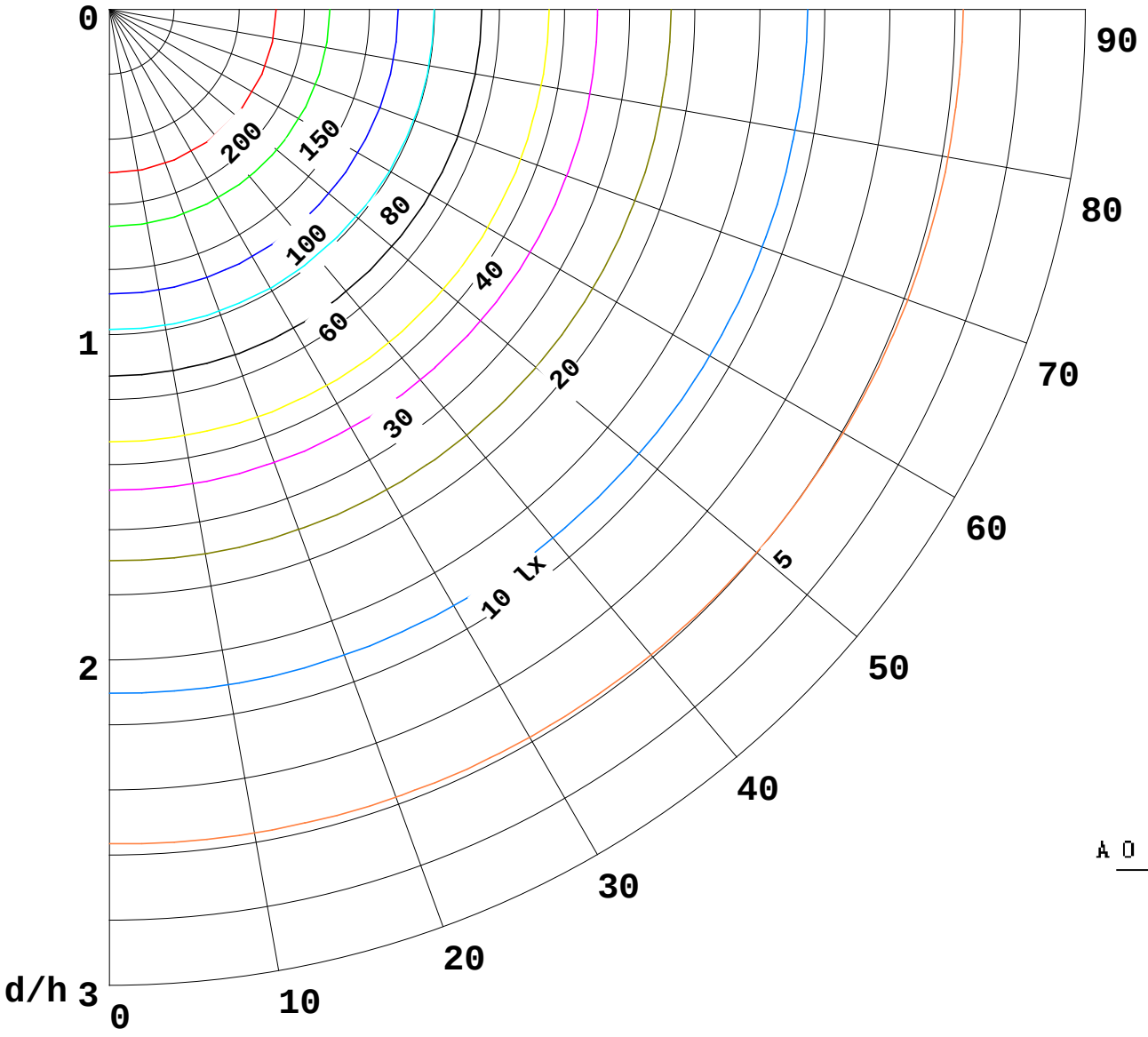
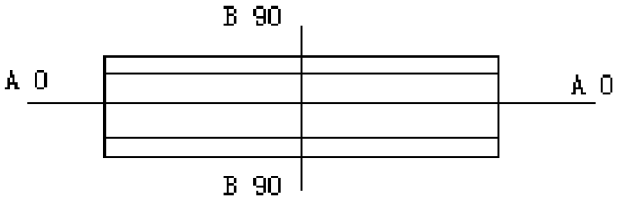
g Interval: 1.0DEG
Test System:EVERFINE GO-2000B_V1 SYSTEM V2.0.400
Humidity:65.0%
Test Distance:8.300m [K=1.0000]
Remarks:

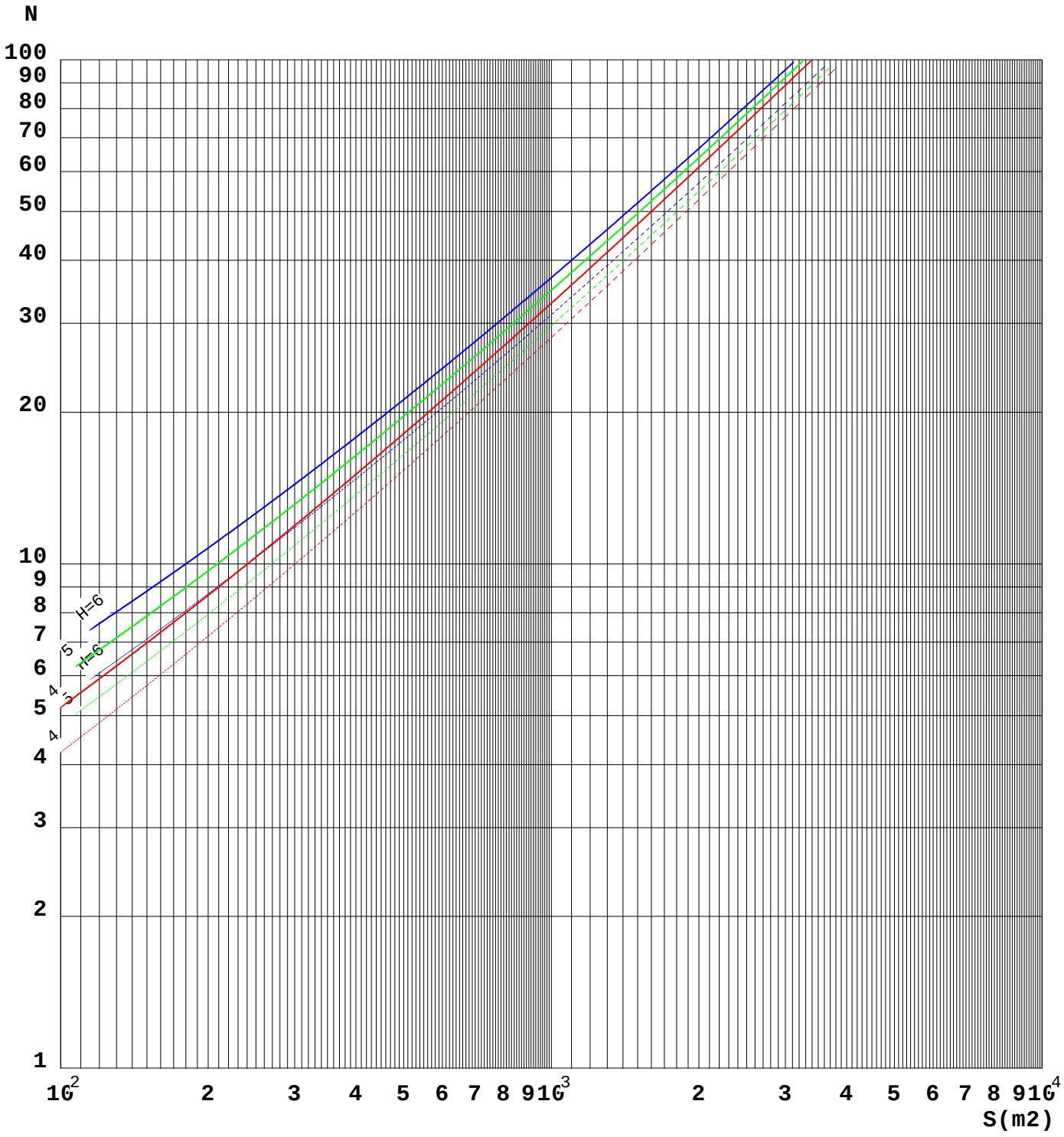

I(cd)
270
90
280
80
290
70
300
60
310
50
320
40
330
30
340
20
350
10
0
200
400
600
800
1000
1200
1400
1600
1800
2000
A
B
A
B


B 90
A 0
A 0
B 90

1000 lm K = 1


0
90
80
70
60
50
40
30
20
10
0
1
2
3
d/h
200
150
100
80
60
40
30
20
10 lx
5


B 90
A 0
A 0
B 90

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